RELATIONSHIP BETWEEN MONEY GROWTH AND INFLATION: EMPIRICAL EVIDENCE FROM NIGERIA

By

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Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Partial Fulfillment of the Requirement for the Master of Economics

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ABSTRACT

This study examines the relationship between money growth and inflation in Nigeria using cointegration and causality analysis. The study used annual time series data from 1970 to 2012, Johansen cointegration approach, Vector Error Correction Model (VECM) and Granger causality test are used to identify long run relationship, the short run dynamic and causal relationship among the variables respectively. The empirical results confirm that in the long run money supply growth has significant and positive relationship with inflation while lagged value of money supply growth has negative and insignificant relationship with inflation in the short run. Moreover, the causality test result reveals that money supply growth has unidirectional causal relationship with inflation, the causal relationship runs from money supply growth to inflation. However, interest rates and import have positive and significant relationship with inflation but exchange rates and GDP have negative and significant relationship with inflation in the long run. In the short run lagged GDP variable has significant and positive relationship with inflation, lagged import variable and lagged interest rate variable have significant and negative relationship with inflation, while lagged of exchange rate variable has insignificant and negative relationship with inflation in the short run. Moreover, the causality test result reveals that exchange rate, interest rates and GDP variable have unidirectional, bidirectional and no causal relationship with inflation, respectively. The study concludes that for maintaining price stability and minimum rate of inflation, Nigeria needs to reduce money supply growth, improve GDP, reduce interest rate and impose strong import restrictions measures as well as exchange rate depreciation along with import substitution strategy.

ABSTRAK

Kajian ini mengkaji hubungan antara pertumbuhan bekalan wang dan inflasi di Nigeria dengan menggunakan analisis kointegrasi dan analisis penyebab. Data siri masa tahunan daripada 1970 hingga 2012 digunakan dalam analisis empirik. Pendekatan kointegrasi Johansen, Model Vektor Pembetul Ralat dan Ujian Penyebab Granger masing-masing digunakan untuk mengenal pasti hubungan jangka panjang, jangka pendek dan hubungan penyebab antara pemboleh ubah. Keputusan analisi empirik mengesahkan bahawa pertumbuhan bekalan wang mempunyai hubungan positif yang signifikan dengan inflasi dalam jangka panjang manakala pemboleh ubah tertangguh pertumbuhan bekalan wang mempunyai hubungan negatif yang tidak signifikan dengan inflasi. Selanjutnya, keputusan ujian penyebab menunjukkan pertumbuhan bekalan wang mempunyai hubungan penyebab sehala dengan inflasi. Walau bagaimanapun , kadar bunga dan import mempunyai hubungan positif yang signifikan manakala kadar pertukaran dan GDP mempunyai hubungan negatif yang signifikan dalam jangka panjang. Dalam jangka pendek, pemboleh ubah tertangguh GDP mempunyai kesan positif yang signifikan dengan inflasi, pemboleh ubah tertangguh import dan pemboleh ubah tertangguh kadar bunga mempunyai hubungan positif yang signifikan dengan inflasi. Pemboleh ubah tertangguh kadar pertukaran mempunyai hubungan negatif yang tidak signifikan dengan inflasi dalam jangka pendek. Selanjutnya, keputusan ujian penyebab mendedahkan bahawa kadar pertukaran, kadar bunga dan GDP masing-masing mempunyai hubungan penyebab sehala, dua hala dan hubungan penyebab dengan inflasi. Kajian ini juga menjelaskan bahawa kestabilan harga dan kadar inflasi yang minimum dapat dicapai dengan mengurangkan pertumbuhan bekalan wang, memperbaiki GDP, mengurangkan kadar bunga, mengenakan halangan import yang ketat dan depresi kadar pertukaran bersama-sama dengan strategi penggantian import.

ACKNOWLEDGEMENT

First, I would like to thank Allah (SWT) who has made it possible for me to complete this program successfully and equally thank Him for His continued mercy and blessing.

I would like to sincerely thank my supervisor Assoc. Prof. Dr. Sallahuddin Hassan for his constructive comments, valuable suggestions and good guidance. I equally thank him for his kindness and necessary encouragement. I am extremely indebted to him, as I have learnt so much from him.

I am also grateful to my lectures at University Utara Malaysia who gave me a lot of knowledge, cultivated my interest in economics and thus led me to the field of academic research. I would always be thankful to them for everything they have taught me through my academic study at the university.

I owe my loving thanks to my family especially my father Alh. Hassan A. Jakada and my mother Malama Amina H. Jakada for their prayers, supports and encouragement that enable me to successfully complete my postgraduate study in UUM. Not forgetting, special thanks to my lovely brothers and sisters who always supports and encourage me during my master program.

I am indebted to my dear friends. Their friendship, love and kindness always encourage me to overcome difficulties in my study. I owe them since they always supported and gave me full attention for me to solve my problems and gave the enjoyable studying environment. They made my life in UUM a truly memorable experience and their friendship is invaluable to me.

My gratitude goes to my full sponsor Kano State Government for its financial supports of my scholarship. Very special thanks go to Kano state governor Dr. Rabi'u Musa Kwankwaso without his dedication and commitments this scholarship would have been impossible.

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LIST OF ABBREVIATION

ADF	Augmented Dickey Fuller
AIC	Akaike Information Criterion
ARCH	Autoregressive Conditional Heteroskedastivity
CBN	Central Bank of Nigeria
CPI	Consumer Price Index
ECM	Error Correction Model
ECT	Error Correction Term
GDP	Growth Domestic Product
IMP	Import
INF	Inflation
INR	Interest Rate
LM	Lagrange Multiplier
MS	Broad Money (M2)
NNS	New Neoclassical Synthesis
OLS	Ordinary Least Square
PCE	Personel Consumption Expenditure
PPI	Producer Price Index
PP	Phillip-Peron
RE	Rational Expectation
US	United State
VAR	Vector Autoregressive
VECM	Vector Error Correction Model
USA	United State of America

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter presents the general introduction of the research. Background of the study is introduced in Section 1.2 while Section 1.3 provides the problem statements, Section 1.4 is about the objectives of the study. Significance of the study, scope of the study and the organization of the study are discussed in Section 1.5, Section 1.6 and Section 1.7, respectively.

Inflation as a macroeconomic phenomenon generates problems and leads to noises in the working of the economy that is liable to adverse effect on economic growth. Conversely, it is not a simple task to handle the problem of inflation effectively. In order to handle the problem successfully, accurate and precise evaluation of the causes of inflation is seriously needed, because wrong approaches in solving the problem will lead to unintended adverse impacts on the economy.

1.2 BACKGROUND OF THE STUDY

In general, the monetary policy as an instrument of macroeconomic management is aim at promoting price stability, full employment, economic growth and balance of payment equilibrium. In small open economies, however, exchange rate stability becomes a prime concern of the central bank because of its high correlation with price stability. The commercial banks, which constitute the core of the financial system, directly influence price and exchange rate stability through their domestic credit supply, while their impact

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