OBAFEMI AWOLOWO UNIVERSITY

Inflation, Investment and Economic Growth in Selected Sub-Saharan Africa Countries (1986- 2012)

By

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Professor A. E. Akinlo	**Professor P. A. Olomola**
Supervisor	Head of Department

Dedication

This research work is dedicated to my Lord Jesus Christ and my wife, Mrs. Ojo Olubunmi Foluke for all her understanding.

I also dedicate this thesis to my late beloved younger sister Mrs. Sonowo Rabbi Aino who died mysteriously in her sleep on the 17th of May, 2015. I can't forget the lifetime we shared together. I miss you so much. May your gentle soul rest in peace.

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Ojo Samson Isumala
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ABSTRACT

The study determined trends of inflation, investment and economic growth in sub-Saharan Africa and analysed the dynamic interaction amongst investment, inflation rate and economic growth in sub-Saharan Africa region between 1986 and 2012. It also examined the direction of causality in the interrelationship that exist among these variables and established threshold effect of inflation on the relationship between investment and economic growth in sub-Saharan Africa region. These were with the view to determining the relationship amongst investment, inflation and economic growth in Sub-Saharan Africa region for the period 1986 to 2012.

Annual secondary data covering the periods between 1986 and 2012 were employed for the study. Twenty four countries selected from the four main regional economic communities in Sub-Saharan Africa Countries (SSA) such as: Economic Communities of West African States (ECOWAS); Economic Community of Central African States (ECCAS); East African Community (EAC) and the Southern African Development Community (SADC) were used for the study. Data on gross domestic product, inflation, population export, import, money supply and gross fixed capital formation were sourced from the World Development Indicators (WDI) of the World Bank. Tables and graphs were used for the trend analysis. Panel vector error correction model (PVECM) and multivariate causality tests were used to determine the dynamic interrelationship and causal direction of inflation, investment and economic growth in the region. Threshold auto-regression was used to determine inflationary threshold effect in relationship between investment and economic growth for the region.

The results showed an upward trend of economic growth and investment as each respectively rose from 0.35 and -10.98 in 1986 to 3.77 and 6.99 percent in 2012, while inflation rate

increased from 7.6 percent in 1986 to 27.45 percent 1994 before oscillating around 6.45 percent all through 2010 to 2012. The result also showed negative inflation-economic growth nexus; negative inflation-investment nexus and positive investment-economic growth nexus for the region. It also showed bidirectional causality between inflation and growth ($F = 11.36$, $p < 0.05$), while unidirectional causality exists between investment and economic growth as causality runs from investment to economic growth ($F = 2.83$, $p < 0.05$). The relationship between investment and inflation was also unidirectional as causality only runs from inflation to investment ($F = 19.38$, $p < 0.05$). The threshold regression result suggested existence of one inflation threshold value of 4.64 percent. Beyond this threshold value, inflation rate exerted a significant negative effect on economic growth ($t = -2.09$, $p < 0.05$). The result also showed existence of lower positive influence of investment on economic growth at inflation rate beyond the threshold value.

The study concluded that inflation had negative effect on investment and economic growth, while investment produced positive effect on economic growth in sub-Saharan Africa region for the period 1986 to 2012.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

One of the major challenges facing most developing countries of the world today is how to achieve sustainable economic growth that can ultimately lead to economic development. This objective involves producing more goods and services with the same or less materials input. Level of investment, inflation rate and other macroeconomic variables are among factors that often affect this growth objective. Level of investment is said to increase growth through its influence on capital formation (Solow and Swan, 1956; Roman, 1986; and Lucas, 1988). Investment is categorized into private and public investment. Private investment involved private ownership of businesses with profit maximization as sole objective. This objective is usually achieved by augmentation of existing capital stock and sometimes venturing into new ones. Though, the financial benefit of private investments only accrues to their owners, but their impact presents national implication for an economy. The public investment on the other hand, involves government investment on infrastructure, human capital and other investment activities. These two kinds of investment enhance economic efficiency and prosperity of a country.

However, inflation is said to exert negative effect on growth by reducing level of investment and productivity (Fischer, 1993). When prices rise for commodities and other services, the entire economy is affected. The rising prices, known as inflation, affect the cost of carrying out investment and every other facet of the economy. As prices rise, the value of local currency may declines, eroding its purchasing power with each increase in the price of basic goods and services. Low inflation may help an economy to recover from economic recession or depression as the cost of borrowing money for investments activities may likely to be lower.

Relationship between inflation and economic growth usually plays out like a delicate dance. For instance, the growth of gross domestic product (GDP) is vital in stimulating investment decision. If overall economic growth is declining or merely holding steady, it may reduce private companies' profit which is the primary driver of investment performance. However, excessive GDP growth rate is also dangerous to an economy as it most likely comes with increased inflation rate which erodes investment gains by making money and future corporate profits less valuable. This explains why twin policy targets of price stability and incentives for investment attraction have been an integral preoccupation of most governments of developing economies especially the Sub-Saharan African countries. This implies a linkage amongst investment, inflation and economic growth as the effect of inflation on economic growth can be evaluated within the frame of changing level of investment. This also implies that investment and inflation rates are important factors that may reduce or trigger economic growth process.

The conventional perception of these three variables is that there exist an inverse relationship between inflation and growth while investment provides the channel for transmitting inflation impact into economic growth (Stockman 1981). It is generally accepted that inflation has a negative effect on both medium and long-run growth due to its influence on investment and productivity growth (Barro, 1991; Fischer, 1993; and Bullard and Keating 1995). High inflation rate is said to cause various distortions in the economy as it increase commodities prices and decreases the value of real income of households. The falling values of real income discourage households saving which may in turn reduce supply of loanable funds for investment. This implies that high inflation rate may reduce economic growth since economy needs a certain level of savings to finance investment projects.

Furthermore, high inflation rate also influences investment and growth through its distortion of labour market, capital market and international competitiveness. Uncertainty in inflation creates the possibility of short term contracts between employees and employers. This may give rise to frequent renegotiation of wages resulting in reduced productive hours with its negative consequent on growth. Inflation can equally reduce international competitiveness of a country if her exported goods and services are too expensive to attract prospective buyers when compared with goods and services from other countries. This may increase current account deficit especially if such country is an import dependent country.

Many studies have confirmed this negative relationship between inflation and investment as well as between inflation and economic growth. If an economy is not fully adjusted to a given rate of inflation, it may suffer from relative price distortions and since nominal interest rates are often controlled, the real interest rates become negative and volatile, discouraging savings. During periods of high inflation, economic agents is said to experience difficulties in long-term planning as a result of uncertainty about future prices. This restrains them from entering into new contract, decreasing the quantity and qualities of new investment which declines economic growth process (Nicholas, 2012; and Ahortor and Adenutsi, 2009).

On the contrary, theories and empirical studies have presented positions that questioned this conventional perception where inflation is shown to be a necessary lubricant for the wheels of economic growth. They focused on whether high inflation rate distorts investment decisions or not. Evidence from their studies showed that low inflation rate affects level of investment and economic growth. High inflation rate is said to encourage growth through redistribution of income which enhance higher saving for capitalists, driving up investment and economic growth. It also increases economic growth by raising profit rates which stimulates an increase investment level in an economy (Haslag, 1997; and Lioui and Poncet, 2008). Tobin (1965)