

Some Prognostic Factors of Economic Growth in Ghana

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Abstract

The study seeks to ascertain the effect of some prognostic macroeconomic indicators on Ghana's Real Gross Domestic Product (GDP) per capita and its impact on economic policies. The study applied the ordinary least square technique to assess the degree of influence. Historical secondary data was obtained from the development indicators of the World Bank for the period spanning 1975-2013. Significant model coefficients were assessed and found to be stable for prediction ($VIFs < 10$). The study revealed that economic growth under the period of the study is largely explained by foreign direct investment ($p < 0.05$) and government expenditure ($p < 0.05$). It is also evident that exports, inflation and broad money supply under the period of study failed to influence economic growth. The policy recommendation among others is that policies should be put in place to increase both foreign direct investment and government expenditure in Ghana.

Keywords: Variance Inflation Factor, Economic Growth, Macroeconomic, Foreign Direct Investment

1.0 Introduction

After embracing independence in 1957, the immediate challenge that faced the Ghanaian economy was how to augment economic growth in order to reduce extreme poverty, improve health care, overcome illiteracy, strengthen democratic and political stability, improve the quality of the natural environment and become an investment end of choice for international capital, all other things being the same [1]. While rapid growth in China, Malaysia and India for instance, have lifted millions beyond subsistence living, Ghana and many other African countries have, however, experienced the opposite by recording low growth rates, and for some years experienced negative growth rates as at 1970s to early 1990s [2]. Unfortunately, there have not been an exhaustive studies on economic growth in Ghana, as well as significant areas that most policies should be directed towards in order to ascertain acceptable rate of growth and if it exists. Issues of economic growth have received much awareness over the past decade. Nonetheless, the cardinal principles of economic performance and growth are poorly understood. In the past, Ghana has embraced several models of Growth presented by World Bank, IMF and other institutions which have been discussed widely, yet much is still expected from the country although she claims to be in lower middle income status.

In this regard, the study seeks to examine some macroeconomic indicators of economic growth in Ghana between the period of 1975 and 2013, by the means of ordinary least square approach and thereby determine ways by which the indicators under consideration affect economic policy formulation and implementation.

2.0 Review of Related Literature

Barro [3] explored some factors influencing economic growth across 100 countries. Evidence from his study revealed that, the growth rate was enhanced by higher initial schooling and life expectancy, lower government consumption, better maintenance of rule of law, lower fertility, lower inflation and improvement of terms of trade given an initial level of real GDP per capita. The study also discovers that for a given values of these indicators and others, growth was inversely related to the starting level of real GDP per capita, the study however identified political freedom as having a weak effect on growth. Expansion of political rights at low levels was encouraged.

Ullah and Rauf [4] examined the determinants of economic growth for some selected Asian countries using a panel data for the period spanned from 1990 to 2010. The study found that the selected countries economic growth is positively

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influenced by saving rate and foreign direct investment. Conversely, export was found to have a negative impact on economic growth while labour force and tax rate had no impact on economic growth.

Ledyaeva [5] examined some macroeconomic indicators of economic growth in Russia. A modification of Barro and Sala-i-Martin's empirical framework [6] of growth model was specified. Seventy-four (74) Russian regions were covered for the period spanning 1996-2005. The study made use of both panel and cross country data. The study revealed that the financial crisis of 1998 decreased gross state product (GRP) per capita growth in Russia by 56 percent. Ledyaeva [5] also found out that a unit percent increase in the level of domestic investment would result to 34 percent in GDP per capita growth. Again, it was found that foreign direct investment (FDI) was not important for Russian economic development. The findings further revealed that, other specified control variables, natural resource availability did not contribute significantly to economic growth in Russian regions. He achieved the same results when he replaced the natural resources variable with oil variable. He concluded that in order to improve economic growth in poor affected Russian regions, the authorities must induce domestic investment in these regions.

Ikechukwu [7] investigated the effects of money supply on economic growth in Nigeria for the period of 1981 to 2010. He made use of the ordinary least square approach to assess the degree of influence the variables have on each other. In the model specified, real GDP was the dependent variable whilst broad money supply, real exchange rate, and real interest rate were the independent variables. Evidence from the study revealed that real interest rate and real exchange rate under the period of study failed to influence economic growth. On the other hand, economic growth under the period of study was largely explained by broad money supply.

Ismaila and Imoughele [8] investigated some macroeconomic determinants of economic growth in Nigeria measured by real GDP per capita. The study made use of time series data obtained from Central Bank of Nigeria for the period 1986 to 2012. Johansen's co-integration was used to assess short and long run relationship between economic growth and its determinants, Augmented Dickey Fuller (ADF) test was used for the unit root test while ordinary least square was also employed to assess the level of influence the independent variables have on GDP. Evidence from the study revealed gross fixed capital formation, foreign direct investment and total government expenditure were the main determinants of economic growth under stable inflationary rate. Recommendation amongst others was that the Nigerian government should retain tight monetary and fiscal policies in order to fight inflation in Nigeria.

Adu [9] also analysed determinants of economic growth in Ghana. His study sought to look for robust evidence on the determinants of economic growth by employing the usual parametric time series analysis with non-parametric local kernel regression. Adu's robust evidence found that investment rate, labour force, financial development, terms of trade and trade openness were the main determinants of growth in Ghana. However, Inflation was found not to be a robust determinant of long run economic growth in Ghana. With the exception of inflation and trade openness, all the other regressors had positive impact on growth from both parametric and non-parametric model.

Antwi *et al.*, [10] examined the impact of some macroeconomic indicators on economic growth by means of cointegration and error correction model for the period 1980 to 2010. Evidence from the study revealed that long –run economic growth is largely determined by foreign direct investment, physical capital, foreign aid, inflation and government expenditure. The study also discovers that short term changes in labour force does not affect economic growth.

In the nut shell, many studies have been conducted on determinants of economic growth. Many of these work focused on the interrelationship that exist between real GDP growth and its determinants without necessarily paying much attention to specific areas where most policies and strategies should be directed towards in order to attain desired rate of growth deemed paramount to propel the growth process of Ghana. This in effect has created some gaps in the economic growth determinants literature. In this regard and many others, the study seeks to assess some major determinants of GDP growth in Ghana during the period of 1975 to 2013. In particular, it seeks to contribute to the numerous existing literature by concentrating mainly on specific areas that most policy options should be directed towards in the Ghanaian economy as far as economic growth is concerned.

3.0 Data and Variable Description

3.1 Data Source and Method of Collection

The study made use of historical secondary data obtained from the development indicators of the World Bank for the period spanning 1975-2013. The World Bank collects these data from Ghanaian officials and World Bank representatives in Ghana, annually. The data was extracted from the website of the World Bank whose link is given by <http://data.worldbank.org/country/ghana>

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