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**A MONETARY ANALYSIS OF GHANA: EXAMINING THE IMPACT  
AND THE CAUSAL RELATIONSHIP BETWEEN MONETARY POLICY  
AND INFLATION IN GHANA**

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# A MONETARY ANALYSIS OF GHANA: EXAMINING THE IMPACT AND THE CAUSAL RELATIONSHIP BETWEEN MONETARY POLICY AND INFLATION IN GHANA

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## Abstract

**Purpose:** The main objective of the study was to examine the impact and the causal relationship between monetary policy and inflation in Ghana.

**Methodology:** Annual time series data spanning from 1985 to 2017 with Auto Regressive Distributed Lagged (ARDL) model were employed for the analysis.

**Findings:** The outcome from the study shows that, monetary policy rate had insignificant negative relationship with inflation in both the short and the long run. Again, interest rate, domestic investment and money supply were found to have significant positive impact on inflation in both the long and the short run for a specific period chosen for the study. The causal relationship shows that monetary policy rate granger causes money supply within the period under study

**Unique contribution to theory and practice:** The study recommends that policy makers need to keenly consider the levels of money supply in Ghana so as to ensure a stable retail price levels. The Government of Ghana needs to evaluate the prevailing levels of retail prices and set the interest rates on the 91-day Treasury bills because they are majorly treated as risk free rate hence determines other interest rates and inflation levels in Ghana.

**Keywords:** *Regulator, Monetary Policy*

## INTRODUCTION

### 1.0 Background of study

The account of monetary management in Ghanaian economy can be grouped into two key distinct levels i.e. the period linked with monetary controls and the period under which monetary policy has been allowed to develop in a setting of a liberalized environment. Between 1976 and 1986, Ghana experienced a great deal of volatility. During most of the period, price controls were in force and there were changes in economic policy that were later followed by reversals.

In 1983 an economic recovery programme was introduced, which sought to restructure the economy and reverse the trends of economic decay. It quickly became clear to the government that, if the economic reforms were to lead to a sustainable resumption of growth in the economy, a restructuring of the then distressed financial sector had to be undertaken during 1983-86. The Government of Ghana, in conjunction with the World Bank, introduced financial sector reforms with a Financial Sector Adjustment Programme in 1987( Quartey & Afful-Mensah, 2014). By 1992, interest rates and credit had been decontrolled and institutional arrangements to facilitate the system of indirect monetary management put in place. The framework for monetary policy conduct then became the IMF's financial programming technique. The framework used high powered money as the operational target whilst broad money served as the intermediate target (Kwakye, 2012). The Bank of Ghana was granted operational independence in 2002 to employ policy tools which will stabilize inflation around the medium-term target. Its framework for conducting monetary policy was Inflation Targeting, in which the central bank uses the Monetary Policy Rate to set the monetary policy stance and anchor inflation expectations in the economy (Addison, 2008).

In Ghana, the upward shift in the general price level has generated public debate over decades because of its adverse effect on human welfare and the standard of living of its citizens. An increase in the price of goods may cause instability in the economy because the value of money falls within a shortest time period. A continuous rise in the general price level is seen as one of the serious macroeconomic problem which creates uncertainty when planning for the future (Asquo, 2012).

### 1.1 Problem statement

In Ghana, the upward shift in the general price level has generated public debate over decades because of its adverse effect on human welfare and the standard of living of its citizens. An increase in the price of goods may cause instability in the economy because the value of money falls within a shortest time period. A continuous rise in the general price level is seen as one of the serious macroeconomic problem which creates

uncertainty when planning for the future (Asquo, 2012).

The quantity theory of money states that when there is a rise in the supply of money, it will lead an equal percentage increase in the price level. According to this theory, changes in prices are mainly triggered by changes in circulation of money (Ricardo, 1817). According to Keynes, an upward shift in the general price level is caused by arise in aggregate demand exceeding aggregate supply while Monetarists are certain that price increases is a monetary phenomenon and that monetary policies mostly affect economic activities (Mwenda, 2013).

Amoah & Mumuni (2008) concluded that structural reforms and the deregulation of the financial sector have resulted in parameter instability in the demand for broad money in late 1990s and money no longer provides useful information for predicting future inflation and output. Quartey & Afful-Mensah (2014) studied recent monetary and financial policies pursued as well as the possible inter-relationships in Ghana. The outcome suggested that any effective monetary policy should be supplemented by fiscal discipline to ease monetary difficulties associated with huge budget deficits. Research into the monetary policy-inflation nexus has important implications on the welfare of its citizen. This poses serious problems for the country's policy. Much research is thus, required to establish the relationship and the causality between these two variables. It is against this background that this study seeks to investigate the relationship and direction of causality of these variables to add to the existing argument in the literature.

## **1.2. Objectives of the study**

The aim is to examine the effect of monetary policy in controlling inflation in Ghana. It specifically sought to:

- i. Analyze the trends in monetary policy rate and inflation rate in Ghana.
- ii. Examine the long and short run impact of monetary policy rate on inflation rate in Ghana.
- iii. To identify the direction of causality between money supply, monetary policy rate and inflation in Ghana.

## **2.0 THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

This section focuses on the review of relevant literature of the subject. It comprises review of theoretical and empirical studies related to the topic.

### **2.1. Quantity theory of money**

Friedman and Schwartz (1963) examined the history of monetary in their full study of the United States from the Civil War to 1960 using equation of exchange ( $MV = PY$ ) framework. According to them a higher stock of money ( $M$ ) would bring a higher price level ( $P$ ) and other things- namely, real output ( $Y$ ) and velocity ( $V$ )-equal.

Pigou (1947) also explained that at full employment in any economy, the velocity (V) of money supply is constant and the number of transactions (T) in the economy is also constant. Also, when money supply (M) increases it has a positive effect on the price level. Monetarists stress that there is a positive correlation between money supply and price levels (inflation) (Friedman and Schwartz 1963). This means an upward shift in the supply of money by expansionary monetary policy would bring upward adjustment in prices (inflation) and vice versa.

### **2.2 Keynesian Theory**

According a book 'The General Theory of Employment, Interest and Money' published in 1940 by Keynes, an upward shift in overall price levels is caused by a rise in the aggregate demand which is over and above the growth in aggregate supply. An economy with full employment output level, any upward shift in private consumption, government expenditure and private investment will lead to a rise in aggregate demand; thus upward shift in general price levels.

### **2.3 Empirical Literature**

Gul, Mughal & Rahim (2012) reported on how monetary tools affect macroeconomic variables in Pakistan. The study used OLS to estimate for its outcome. The outcome indicated that money supply had a strong positive connection with inflation but a negative relationship with output. Exchange rate influenced output negatively.

Dalhatu (2012) studied shocks in monetary policy and its reactions on inflation, market interest rate and exchange rate in Nigeria. The study adopted Structural VAR framework. The outcome revealed that market interest rate and exchange rate are more responsive to shocks than inflation.

Bacchetta (2018) study conducted in Europe examined the potential for monetary policy to avoid self-fulfilling sovereign debt crises. Their study combined a version of the slow-moving debt crisis model proposed by Lorenzoni and Werning (2014) with a standard New Keynesian model. Their study determined the optimal path of inflation required to avoid a self-fulfilling debt crisis. Stronger price rigidity implies more sustained inflation were some of the findings from the study.

According to Neri & Ferrero (2017) inflation in the euro area has been falling since mid-2013, turned negative at the end of 2014 and remained below target thereafter. The paper employs a Bayesian VAR to quantify the contribution of a set of structural shocks, identified by means of sign restrictions, to inflation and economic activity. Shocks to oil supply do not tell the full story about the disinflation that started in 2013, as both aggregate demand and monetary policy shocks also played an important role. The lower bound to policy rates turned the European Central Bank (ECB) conventional monetary policy de facto contractionary. A country analysis confirms that the negative effects of oil supply and monetary policy shocks on inflation was widespread, albeit with different

intensity across countries. The ECB unconventional measures since 2014 contributed to raising inflation and economic activity in all the countries. All in all, their analysis confirms the appropriateness of the ECB asset purchase program.

López-Villavicencio and Mignon (2017) estimated the exchange rate pass-through (ERPT) to import and consumer prices for a sample of 14 emerging countries over the 1994Q1-2015Q3 period. To this end, the traditional bivariate relationship between the nominal effective exchange rate and inflation was argued for by accounting for monetary stability proxied by the inflation environment, monetary policy regime and central bank behavior. They showed that both the level and volatility of inflation, as well as adopting an inflation target or the transparency of monetary policy decisions clearly reduce ERPT to consumer prices. However, uncertainty about domestic monetary policy seems less relevant in explaining the pass-through to the price of imports.

Amoah and Mumuni (2008) arrived at the conclusion that structural reforms and the deregulation of the financial sector has caused parameter instability in the demand for broad money in late 1990s and money no longer provides useful information for predicting future inflation and output.

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Type of Data and Sources**

Annual time series data covering the period 1985 to 2017 were used for the study. The variables used include interest rate, monetary policy rate and inflation which were taken from Bank of Ghana. Four other control variables which were included in the model were domestic investment, trade openness, money supply and foreign direct investment were sourced from the World development indicators.

#### **3.2 Model Specification**

The model used for the study follows the theoretical literature used by Laryea and Sumaila (2001) and Adu, Marbuah & Mensah (2013). The model follows the simplified equation of the form;

$$INF_t = (MPR_t, INT.R_t, MS_t, TO_t, FDI_t, TO_t, DI_t) \dots \dots \dots \text{Eqn (3.1)}$$

Where INF is the level of inflation rate in the economy, MPR represent the monetary policy rate and INT.R denotes interest rate for the economy which is the lending rate. MS represent the money supply in the economy whereas TO is the trade openness of the country. FDI is the foreign Direct Investment inflow into the country while DI is the domestic investment of the country. t in the equation can be represented as t=1,2,3,...n which is the time period for the study. The estimation form of the equation can be written in the form as;



$$INF_t = B_0 + B_1 MPR_1 + B_2 INT.R_2 + B_3 MS_3 + B_4 TO_4 + B_5 FDI_5 + B_5 DI_5 \epsilon_t \dots \text{Eqn (3.2)}$$

Where  $\epsilon_t$  is the stochastic error term

### 3.3 Definition of Variables

#### 3.3.1 Inflation

Inflation is the continuous rise in the overall price level of goods and services within a country. Consumer Price Index was used as a proxy for inflation which is the measure of the average price level of goods and services purchased by consumers in the country.

#### 3.3.2 Monetary Policy Rate

The rate at which universal banks borrows funds from the Bank of Ghana. It acts as an indicator in determining the lending rate of commercial banks in Ghana.

#### 3.3.3 Interest Rate

It is simply defined as the cost of borrowing. It is measured as the rate of interest on commercial bank loans. 91 T-bill rates were used as a proxy for interest rate.

#### 3.3.4 Money Supply (M2)

Broad stock (M2) was used as a proxy for money supply. It includes the legal tender of a country and all other liquid instruments flowing in the country at a specific time period.

#### 3.3.5 Trade Openness

It is the sum of exports and imports to GDP of a country. According to conventional view, trade openness is expected to be negatively related with inflation.

#### 3.3.6 Foreign Direct Investment

It is the inflow of investment into the country from private individuals or investors into the economy to boost production in the country. Foreign direct investment usually comes into the country for productivity by multinationals rather than from government to government.

#### 3.3.7 Domestic Investment

Investment as a percentage of GDP was used as a proxy for domestic investment. It is the total quantum of capital acquisition made in a country within a specific period.

### 3.4 Estimation Techniques

Dicky Fuller Unit Root test was used to test for the stationarity of the data. Also, co-integration test was conducted to know if there exists a long-run relationship between the variables.

#### 3.4.1 The ARDL Model

The study made use of ARDL model in assessing the impact of independent variables on inflation rate in Ghana. The ARDL estimating technique was chosen because it is applicable to a set of time series that are integrated of both orders one and zero, thus I(1) and I(0). The generalized ARDL model (p, q) is specified in equation 3.4

$$Y_t = \gamma_{0i} + \sum_{i=1}^p \delta_i Y_{t-i} + \sum_{i=0}^q \beta_i X_{t-i} + \varepsilon_{it} \quad \dots\dots\dots (3.4)$$

$Y_t$  denote a vector and the variables in  $X_t$  are allowed to be either I(0) or I(1).

$\beta$  and  $\delta$  are coefficients;  $\gamma$  denote the constant;  $i=1, \dots, k$ ;  $p, q$  are optimal lag orders;  $\varepsilon_{it}$  represent the error terms. Therefore, the dependent variable is a function of its own lagged values as well as the current and the lagged values of other exogenous variables in the model. The lag for the dependent variables is represented by  $p$  and that of the exogenous variables is  $q$ .

#### 4.0 DATA ANALYSIS AND DISCUSSION

##### 4.1 Trend Analysis of Inflation and Monetary Policy

In order to achieve the first objective, the subsection presents the trends in inflation and money policy rate from 1985 to 2017.

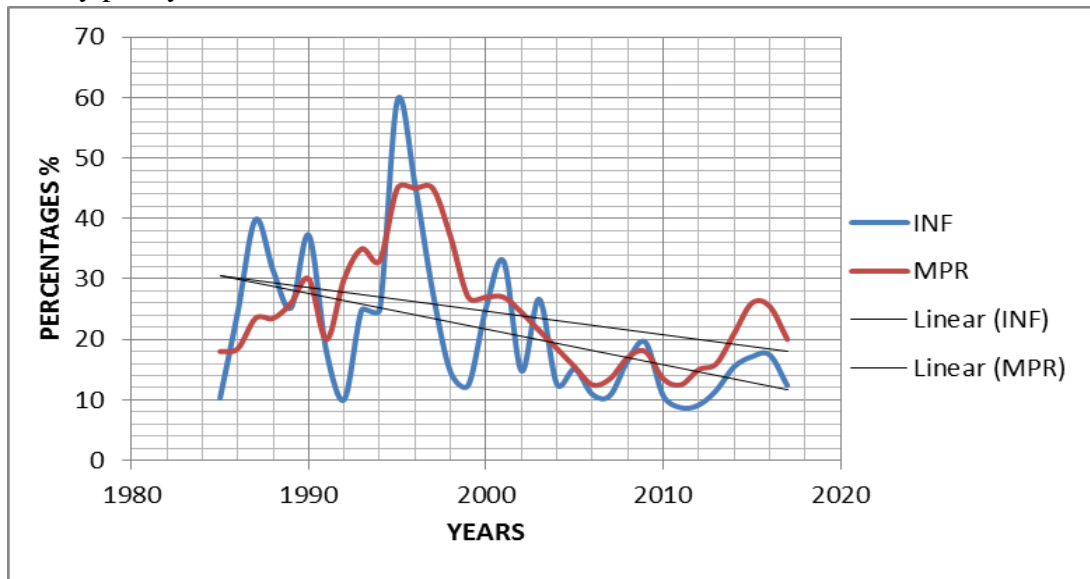


Figure 4.1: Trend Analysis of Monetary Policy Rate and Inflation rate

The trend in monetary policy rate in figure 4.1 shows that, monetary policy rate has been rising from the early 1985 (18%) to 1990 (30%), declined in 1991 (20%), rose again from 1992 (30%), with an occasional fluctuations, to 1995(45%) stabilized for some time (45% in 1996 and 1997) and then declined sharply with an occasional fluctuations from that time up to 2017 (20%). From 1980 to the late 1990’s the Ghanaian economy encountered



major set-backs in most economic indicators. This resulted in high inflation in 1987 (39.6%), 1990 (37.3%) and 1995 (59.6%). During the period under review that is, from 1985 to 2017, Ghana has experienced very high rates of inflation. Ghana recorded a single-digit inflation of 8.7% in 2011 and 9.2% in 2012. This was due to the conscious determination of Bank of Ghana to regulate inflation by putting in place measures such as stabilizing the exchange rate. Also, reduced government expenditure, declining oil prices and stable utility prices as well as low world inflation due to the global recession is said to have contributed to the single-digit inflation in 2011 and 2012 (Kwakye, 2012). In the period studied, inflation rates averaged 28% which is very high by any standard. The maximum inflation rate experienced was in 1983. However, the minimum inflation rate was 8.73 % and was obtained in 2011. Ghana again experienced single digit inflation of 8.73% in 2011 and 9.2% in 2012.

#### 4.2. RESULTS FOR UNIT ROOT TEST

Table 4.1 presents the unit root or stationary test of the variables.

Argumented Dickey Fuller (ADF) Test.

Variables	Level		First Difference	
	Constant	Constant &Trend	Constant	Constant &Trend
INF	-4.225 ***	-5.289 ***	-8.008***	-7.860 ***
INT. R	-1.801	-2.529	-5.655 ***	-5.654 ***
MPR	-1.539	-2.015	-5.005 ***	-4.985 ***
MS	-1.253	-1.352	-5.666***	-6.411***
TO	-2.112	-2.083	-5.446***	-5.425***
FDI	-1.064	-2.066	-4.901 ***	-4.886***
DI	-2.222	-4.161	-7.888***	-7.781***

Note: \*\*\*, \*\*, and \* represent significance at 1%, 5% and 10% respectively.

From Table 4.1, inflation rate was the only variable which is stationary at levels. All the other variables which include, monetary policy rate, trade openness, interest rate, domestic investment, foreign direct investment and money supply were not stationary at levels but after first difference

#### 4.3. ARDL Bounds Test

This study used Autoregressive Distributed Lag (ARDL) bounds test approach to examine the presence of long run relationship between the variables.

Table 4.2 Co-integration Results

F-statistic	Lower Bound	Upper Bound
3.83**	2.45	3.61

Source: Author's construct, 2020. Note: \*\*denotes significance under 5% level

The outcome displayed in Table 4.2 establishes the presence of a long run equilibrium relationship among the series used. This is because the F-statistic is greater than the upper bound.

#### 4.4. Long Run Relationship

Table 4.3 present results from the ARDL estimates in the long run.

Table 4.3 Long run results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>TO</b>	-6.547	2.226	-2.941	0.009
<b>MS</b>	1.425	0.339	4.211	0.001
<b>MPR</b>	-0.031	0.021	-1.491	0.154
<b>INT. R</b>	0.082	0.021	3.844	0.001
<b>FDI</b>	-0.099	0.138	-0.721	0.481
<b>DI</b>	0.044	0.017	2.535	0.021
<b>C</b>	2.750	0.148	18.521	0.000

Source: Author's own construction, 2020

From Table 4.3, the p-value of money supply (i.e. 0.001) indicates that Money supply had a significant impact on inflation rate in Ghana in the Long run. The coefficient is also positive which also implies that money supply has a positive significant impact on inflation at 5% significance level. In view of this, with all other things being equal, a 1% rise in the money supply would lead 1.43 rise in the inflation rate over the period under study and vice versa. There is inflation when the supply of money grows faster than the normal economic activities (production of goods). Upward shift in the price of goods can also be affected by factors beyond supply of money such as fiscal policy of the government. Increasing the money supply faster than the growth in real output will cause inflation. But if the money supply increases at the same rate as real output, then prices will stay the same. Theoretically, high money supply growth is likely to lead to high rate of inflation from the monetarists' view holds.

The p- value of monetary policy rate which is greater than 5% shows that its impact is statistically insignificant. This indicates that changes in the policy rate have not had a

significant influence in determining the level of inflation in Ghana in the long run. The outcome from the table shows that a basis point increase in monetary policy rate would lead to 0.03 percent decrease in inflation rate over the period.

From the table above, domestic investment had a p-value of 0.021 which reveals that it had positive significant impact on inflation rate in Ghana. A one dollar increase in domestic investment would lead to 0.021 cent increase in inflation over the period under study. Domestic investment may have a positive relationship with inflation due to improvement in other macroeconomic indicators when turns to boost investors' confidence even though inflation could be high. (Abu and Alaaeddin,)

Furthermore, interest rate and trade openness had p-values less than 5% which shows that these variables had a significant impact on inflation in Ghana in the long run. Results from the table show the existence of inverse relationship between trade openness inflation rates whereas interest rate influenced inflation rate positively over the period. Foreign Direct Investment revealed a negative but insignificant impact on inflation in the longrun.

#### 4.5. Short Run Relationship

Table 4.4 estimated ARDL short run results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>D(DTO)</b>	-5.169	1.760	-2.936	0.009
<b>D(DMS)</b>	1.125388	0.423278	2.658746	0.017
<b>D(DMPR)</b>	-0.024158	0.019673	-1.227985	0.236
<b>D(DINT)</b>	0.032686	0.012341	2.648561	0.017
<b>D(DFDI)</b>	0.185570	0.106797	1.737601	0.100
<b>D(DDI)</b>	0.034638	0.012335	2.807997	0.012
<b>CointEq(-1)</b>	-0.789533	0.158015	-4.996572	0.000
			Autocorrelation	0.062
			Heteroscedasticity	0.289
			Normality Test	0.74

Source: Author's own construction, 2020

Just like the long-run results, monetary policy rate and foreign direct investment could not exert any significant effect on inflation in Ghana for the period under study.

Supply of money in the short-run had a positive significant impact on inflation rate in Ghana. From the table it shows that 1% rise in the supply of money would lead to 1.13 percent increase in inflation over the period.

From table 4.4, Trade Openness has p-value of 0.009, indicating that it has a statistically negative significant influence on inflation rate in Ghana in the short run. This indicates

that trade openness is statistically significant in the short run at 5% significant level. In view of this, all other things being equal a one unit increase in trade openness in Ghana would lead to a 5.17 percent fall in inflation rate.

Interest rate and domestic investment had a positive significant influence on inflation rate.

The co-integration equation term (CointEq) measures the speed needed for the dependent variable to respond to changes in the independent variables before it converges to its long run equilibrium. The negative sign of its coefficient and its high significance implies that the system is effective in its adjustment to restore equilibrium. The coefficient of 0.7895 and its high significant of 0.000 indicates that the model is stable. The coefficient of 0.7895 also means that it will take an adjustment speed of 78.9 percent to restore long run equilibrium within a year, when there is a shock in the short run.

Lastly, from Table 4.4 above, the result of the Breusch Pagan test with a p-value of 0.289 indicates that there that there is an absence of heteroskedasticity among the error terms. The p-value of the normality test 0.74 indicates that the data residual term is normally distributed. Breusch-Godfrey LM test with a p-value of 0.062 means that the null hypothesis of no serial correlation or no autocorrelation cannot be rejected. It is therefore concluded that there was no serial correlation among the variables.

#### 4.6 Granger Causality Test

This was done to ascertain whether there is a causal link between the variables as well as the direction. This proposes that while the past values can predict future values, the future values cannot cause or predict that of the past values. In this vein, Y Granger causes X when the past values of Y can predict X more than the past values of X. The results are shown in Tables 4.5

**Table 4.5 Granger Causality Test between MPR and INF, MPR and MS**

Null hypothesis	F-Statistic	Prob.	Decision
DMPR does not Granger cause INF	0.09022	0.889	Accept
INF does not Granger cause DMPR	5.67301	0.393	Accept
DMPR does not Granger cause DMS	0.09022	0.000	Reject
DMS does not Granger cause DMPR	5.67301	0.000	Reject

*Source: Researcher's Computation using Eviews 9, 2020*

From the table 4.5, the null hypothesis which implies that monetary policy rate does not Granger cause inflation is accepted with a probability value of 0.889 implying acceptance at 5% significance level of the null hypothesis. A conclusion can therefore be drawn that monetary policy rate does not granger causes inflation in Ghana.

Again, the null hypothesis which implies that monetary policy rate does not granger

cause money supply is rejected with a probability value of 0.000 implying rejection at 5% significance level of the null hypothesis. A conclusion can therefore be drawn that monetary policy rate granger causes money supply in Ghana.

#### **4.7. Discussion of the findings**

High and variable inflation distorts the smooth functioning of the economy because of its effect on the economic value of the Ghana cedi. To mitigate this, the Government of Ghana has given the Bank of Ghana (BoG) the objective of price stability. As Bernanke (2005) noted, a high inflation complicates long-term economic planning, creating incentives for households and firms to shorten their horizons and to spend resources in managing inflation risk rather than focusing on the most productive activities while low and stable inflation brings stability to financial systems and fosters sustainable economic growth over the longer run.

In Ghana, the inflationary rate as measured by the consumer price index has fluctuated over the period of study. There are several factors that can be attributed to this cause. From the regression analysis conducted above, the study established that the four factors studied here affected inflation up to 68.3% indicating that there were other variables affected inflation that had not been factored in this study.

From the study, the rate of inflations seems to have increased following increases in the money supply and 91-day Treasury bill/ interest rate. This indicates that there is a positive relationship between these variables and the rates of inflation recorded in Ghana. Bank of Ghana is mandated through its monetary policies to check the rate of inflation because inflation can affect economic growth through financial intermediaries and has a direct effect on growth of Ghana's economy as well.

#### **5.1. Summary of the findings**

The outcome of the study shows that, monetary policy rate had negative insignificant impact on inflation in both the short and the long run.

Again, interest rate, domestic investment and money supply were found to have positive significant effect on inflation in both the long and the short run for a specific period chosen for the study.

Also, trade openness had a negative significant impact on inflation in both runs of the study. Besides, foreign direct investment had a negative significant impact on inflation only in the long run. Lastly, monetary policy rate does not granger causes inflation in Ghana.

#### **5.2. Conclusion**

The paper investigated the impact and the causal relationship between monetary policy and inflation in Ghana. Data was sourced from the Central Bank of Ghana statistical bulletin. The study estimated the Augmented Dickey-Fuller (ADF) unit root test, ARDL

Bound test and the Auto Regressive Distributed Lagged (ARDL) model. The Bound test result revealed the presence of a long-run relationship between inflation rate and the selected variables.

From the analysis in chapter four and summary of findings above, this study concludes that the monetary policy in Ghana are relatively effective in controlling the levels of inflation recorded in Kenya.

The study also concludes that through money supply, the Central Bank is able to influence the amount of money in circulation in Ghana thus control the general retail prices of the prevailing rates of retail prices. The monetary committee holds money supply as an important variable in controlling the level of general retail prices in the Ghanaian economy.

Through the 91-T bills, the Ghana government is able to borrow money from the public thus reducing the amount of money in the hands of its citizens to finance its expenditure. This is further elaborated by the effect of interest rates charged by commercial banks. If the 91 day Treasury bill rate increases, it prompts an increase in the short term interest rates which then reduces the borrowing level of citizens as loans will have become more expensive. Even for the households with surplus income, they will be attracted to save to earn a higher interest hence bring down the levels of inflation in the Ghanaian economy.

### **5.3. Recommendation**

Based on the result obtained and summarized in section 5.1, the following recommendations are made.

Firstly, policies such as a regularly increase in monetary policy basis point must be pursued by the Central Bank because findings show that monetary policy rate had a negative effect on inflation in Ghana in both the short and the long run. Thus, an increase in monetary policy basis point will lead to a decline in inflation. There must be a critical analysis of the intended inflation target whenever setting the 91 T-bill rate.

Secondly, the study also recommends that the policy makers need to keenly consider the levels of money supply in Ghana so as to ensure a stable retail price levels. The Government of Ghana need to evaluate the prevailing levels of retail prices and set the interest rates on the 91-day Treasury bills because they are majorly treated as risk free rate hence determines other interest rates and inflation levels in Ghana.



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