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The Relationship between Bank Deposits and Macroeconomic Variables in Ghana: A Co-Integration Approach

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Abstract: This study examined the linkages between macroeconomic variables and how those relationships affect the total deposits of Ghanaian banks. The macroeconomic variables included in this study were Inflation (I), Monetary Policy Rate (MPR), Gross International Reserve (GIR), Public Debt (PD), Gross Domestic Product (GDP), GSE All share Index (GASI), Rate of change in Total Money Supply (M2+), deposits in the banking sector (TD). The study employed monthly data over the period (2015–2020); obtained from the Bank of Ghana monthly time series database. The data were analyzed using Gretl. The cointegration technique was employed in this study to gauge the long-term and short-term responsiveness of the connections. The ADF results indicated that the study variables were non-stationary. The econometric analysis suggested that the study variables, inflation (I), Gross Domestic Product (GDP), Public Debt level (PD), and Total Deposits (TD) in banks operating in Ghana, exhibited a significant positive long-run cointegration relationship. This suggested that the identified variables play a crucial role in explaining the fluctuations in total deposit levels within the Ghanaian banking industry. Bank deposit is strongly exogenous and moves to restore equilibrium through several short-run partial adjustments in the short-run. Also, in the short-run, only the GSE All-share index (GASI) significantly influenced bank deposits, but not in the long-run. In the long run, the relationship was still positive but insignificant.

Keywords: *Bank Deposits, Money Supply, Public Debt, International Reserves, Cointegration.*

1. Introduction

Banks in Africa have undergone several reforms over the period, with Ghana being no exception. Recent reforms and restructuring of the Ghanaian banking sector had economic and financial implications for the country and the banking industry. Ghana's banking sector had seen several reforms since the 1980s when only 12 banks were operating. These reforms led to the liberalization of the sector leading to the influx of several foreign banks into the Ghanaian banking sector and increasing the level of competition in the banking sector. The banking sector continues to experience reforms. In 2017, the Central Bank of Ghana undertook a clean-up exercise in the banking industry in Ghana. Some seven banks lost their banking licenses. Two of such banks were assumed by an existing bank, while the remaining five were consolidated to form a new one. The Central Bank raised the minimum capital requirement of the surviving banks to 400 million Cedis to make them more liquid. The recent banking sector reforms included the cleaning up of the second-tier banks (savings and loans companies) as well as microfinance companies. Governmental activities, be it deliberate intervention in the banking sector like those experienced in 2017 or through fiscal and monetary policies, affected the performance of banking sector players. Macroeconomic factors originate from fiscal policies of the government, such as Inflation (I), Gross Domestic Product (GDP), and the level of public debts (PD).

The Ghana Stock Exchange composite index (GSECI) and those originating from monetary policies such as the Monetary Policy Rate (MPR) and Gross International Reserve (GIR) all have some implications on the liquidity of banks. Although the relationship between these macroeconomic factors on banks' liquidity positions has been wildly researched in advanced countries, more study has yet to be undertaken in the Ghanaian context. Kumar et al. (2020) indicated that monetary policies, in addition to the capital adequacy ratio and the ratio of non-performance loans, influence the performance of banks in New Zealand. Yusuf and Abdulkadir (2020) also found that the policy rate influenced the position of the return on capital employed. In a study conducted in South Africa, Moyo and Tursoy (2020) investigated the potential inflationary effect and the impact of the exchange rates on the performance of banks. The authors found a material negative correlation between bank profitability, Return on Equity (ROE), and inflation. However, they noted a weak association between currency exchange rates and ROE. In a similar study, Jackson et al. (2021) reported a positive correlation between inflation and bank performance. Furthermore, Abate and Mesfin (2019)

identified a significant negative effect of GDP, inflation, and monetary policy rate on Ethiopia's performance of banks in Ethiopia.

Literature on the nexus between macroeconomic factors and the performance of banks has mostly concentrated on measuring the financial performance of banking institutions. These measures of the performance of banks are all determined as a relationship between the profit of the business and some measures of the funds invested in the bank. However, the performance of banks is not limited to the profit realized. Other financial performances of banks include the level of deposits mobilized, loan targets achieved, and asset size and value growth. Although the government bailout of non-performing banks is extensively researched, there is limited empirical evidence regarding the effect of national debt on the banks' performance. For instance, Gerhardt and Vander Vennet (2017) found no improvement in the financial position of banks after the bailout, which resulted in an increment in the national debt. Onyele and Nwadike (2021) found evidence of a long-run adverse effect of national debt on economic growth. In the short run, national debt negatively affects economic stability. The present study investigated the effects of variations in several macroeconomic variables, including inflation, GSE all share index, GDP, monetary policy rate, gross international reserve, growth in money supply, and public debt, on the level of deposit mobilized by all deposit-taking institutions in Ghana. Furthermore, the study examines the individual impacts of monetary policy and fiscal policy on the deposit mobilization of banking firms.

2. Literature Review

The Relationship between Banks' Performance and the Interconnection of Monetary Policy and Inflation: In their research, Kassim et al. (2009) investigated the effects of monetary policy on the balance sheet of conventional and Islamic banks in Malaysia. The authors' findings indicated that the policy rate exerted a more significant influence on the balance sheet of Islamic banks compared to conventional banks. Additionally, the loan portfolio of conventional banks was less responsive to changes in the policy rate. Adesina et al. (2018) studied the monetary policy impacts on banks' performance in Nigeria. The instruments of monetary policy examined included the policy rate, the open market operations, and cash reverse ratios. The study utilized data from the published financials of the banks between 2007 to 2016 and adopted the Ex-post factor and causal research design. The results suggested a significant negative effect of the monetary policy rate on the lending performance of the banks. Zaman et al. (2014) conducted a comprehensive investigation of the Pakistani banking sector to determine the effect of monetary policy on banks' performance. A representative sample of twenty deposit-taking institutions in the country was selected to achieve this.

The study employed robust statistical tools such as regression and correlation analysis. The results of the analysis revealed a significant negative correlation between the monetary policy rate and the performance of banks. This finding underscores the need for a nuanced understanding of the interplay between monetary policy and bank performance in Pakistan. Kumar et al. (2020) studied the impact that monetary policy has on banks' profitability in New Zealand. Their findings suggested that monetary policy significantly affected the financial performance of banks in New Zealand. The capital adequacy ratio, monetary measures, and the non-performing loan ratio impacted the success of banks. Yusuf and Abdulkadir (2020) also investigated the correlation between the performance of banks in Nigeria and monetary policy. They indicated that the policy rate influenced the position of the return on capital employed. The study results suggested that the volatility in the monetary policy decisions results in volatility in the profitability of Nigerian banks. To minimize the volatility in return, this study suggested that the central bank of Nigeria should set effective, realistic, and thoughtful rates to enhance the profitability of Nigerian banks.

Inflation, GDP, and Exchange Rate on Bank Performance: Moyo and Tursoy (2020) conducted an empirical investigation to examine the impact of exchange rates and inflation on the operational efficiency of the South African banking industry. Their results revealed a significant negative relationship between Inflation and the banks' Return on Equity (ROE). However, they found no significant association between the exchange rate and the banks' ROE. In their study, Jackson et al. (2021) investigated the impact of inflation and exchange rates on the financial performance of banks operating within Sierra Leone. To assess financial performance, the authors utilized Return on Equity (ROE) and Return on Assets (ROA) as proxies. The

findings indicated the existence of a positive correlation between inflation and the performance of banks. The study by Abate and Mesfin (2019) investigated the determinants of bank performance in Ethiopia. The study revealed that GDP, inflation, and monetary rate had a statistically significant negative impact on the financial performance of banks operating in Ethiopia. Joanna (2020) examined the correlation between GDP and the quality of banks' loans to determine the direction of such a relationship.

This study involved an analysis of various empirical studies on the relationship. Their findings suggested a proven relationship existed between improvement in GDP and banks' loan quality. Gikombo and Mbugua (2018) examined the relationship between some macroeconomic factors that influence bank performance in Kenya. The macroeconomic factors considered included the exchange rate, Inflation, GDP, and the monetary Rate. ROA and ROE were used as measures of bank performance. The results suggested at all the macroeconomic factors examined significantly influenced the performance of banks. Atukalp (2021) examined the correlation between the stock market's performance and bank performance in Turkey. The analysis suggested that the stock market's performance did not have any material effect on the performance of banks in Turkey. Tan and Floros (2012) conducted research on the correlation between the financial performance of banks in China and factors such as stock market volatility, ownership makeup of the firm, and competitive environment. It was found that when there is high volatility in the stock index, the ROE of the bank increases, and excess return on equity increases. There were limited studies on the impact of national debt on bank performance. However, there were studies about the impact on the national debt from the performance of banks as government bailouts of non-performing banks.

Gerhardt and Vander Vennet (2017) analyzed the effect of government bailouts on banks' profitability and efficiency in Europe by comparing their performance before and after the bailout. Their results suggested no improvement in the financial position of banks after the bailout, which resulted in an increment in the national debt. Nigeria's economic stability resulting from the effect of the national debt was the subject of research by Onyele and Nwadike (2021). Their results suggested a long-run negative effect on economic growth when the national debt increases. In the short-run, national debt negatively affects economic stability. Ünvan and Yakubu (2020) investigated the determinants of deposit mobilization in Ghana's banking industry, with a particular focus on bank-level factors such as size, profitability, and liquidity that affect deposit mobilization while controlling for the macroeconomic variable of inflation. The study's results indicate that bank-specific factors significantly impact bank deposit mobilization. Furthermore, the study found an inverse relationship between inflation and the level of deposit mobilization by the banks. Macroeconomic factors are one of the significant variables that impact banks' performance in all areas of their operations. The impact of several macroeconomic variables has been researched in the literature using various analysis techniques. Among the common macroeconomic factors employed in empirical studies.

Include GDP, Inflation, Interest Rate, Exchange Rate, MPR, and growth in Money supply, among others. These variables are a reflection of the health of the economy which has significant implications on economic agents within the economy. The correlation between these macroeconomic variables and the performance of financial institutions should be extensively researched. Another area of concern is the frequency of data used in most of the empirical studies about the relationship between macroeconomic variables and bank performance. The majority of such studies utilized annual data (Alhassan et al., 2014; Chaibi & Ftiti, 2015; Messai & Jouini, 2013; Opoku-Asante, K, 2013; Winful et al., 2022). Other studies also employed quarterly data (Ghosh, 2017; Louzis et al., 2012; Staehr & Uusküla, 2020). This study utilized monthly data throughout the study period to aid in the identification of both immediate and prolonged effects. It is relevant to understand the impact of macroeconomic factors on deposit mobilization. That is because finance literature (Becker & Knudsen, 2002; Nyasha & Odhiambo, 2018; Sanusi, 2013; Schumpeter, 1911) argues that growth in the financial sector positively impacts national growth through an efficient mobilization of savings and allocation of resources to diversify risk. It also leads to an increased flow of liquidity in the economy and reduced transaction costs of accessing finance. Effective allocation of savings by banks leads to improved productivity and economic growth.

Theoretical Framework: Monetarism is concerned with the macroeconomic impacts of money supply and the function of central banks in an economic system. The theory is quite simple. An increase in the money supply would lead to an increase in consumer spending, while a decrease in the money supply would result in

a corresponding reduction in budgeted expenditures by individuals. In theory, this would influence aggregate demand. The Monetarist Economic theory guided the study as it examines the relationship between macroeconomic variables. This theory is based on the following prepositions. **1.** Inflation results from the Rate of growth in the money supply being higher than the Rate of growth in real output. This relationship is, however, a necessary condition for Inflation, but more is needed for an inflationary condition. **2.** A higher expected inflation will result in a higher nominal interest rate leading to a depreciation in the value of inflated currencies. Persistent Inflation leads to currency depreciation, while persistent disinflation results in currency appreciation. **3.** The impact of monetary expansion is initially observed in output before its effect on price levels. Steinreich (2022) summarised these three prepositions and causal relationships as unproportional increases in money supply lead to Inflation and higher normal interest rates. Unexpected increases in money supply lead to short-term increases in real GDP, and the reverse is also true.

The assertion put forward by Steinreich (2022) maintains that the roots of monetarism can be traced back to Richard Cantillon (1680-1734), who laid the foundation for the concept that an increase in the money supply would inevitably lead to a rise in demand and consequent inflation. This perspective was later developed and expanded upon by notable economists such as Henry Thornton (1760-1815), David Ricardo (1772-1823), and John Mill (1806-1873), who shared a common belief in the inflationary consequences of monetary expansion. In addition to the aforementioned, Steinreich (2022) contended that the long-term impact of the relationship between money supply, demand, and inflation on macroeconomic stability was examined by Irvin Fisher (186-1947). Nevertheless, the work of Milton Friedman and Anna Schwartz in "The Monetary History of the United States (1867-1926)" advanced and refined the Monetarist theory to its current understanding. The research conducted by Friedman and Schwartz provided valuable empirical evidence to support the Monetarist position and solidified its place as a significant school of economic thought.

3. Methodology

In this section, we briefly describe the estimation technique adopted, the study's model, the data sources, and the variables employed in the study. The study adopted the co-integration method to answer the study questions. This method was adopted because it can be used to discover relationships between variables that have theoretical interpretations. Also, the method allows for estimating economic models and testing certain theoretical hypotheses (Lewis-Beck et al., 2004). A co-integration analysis is critical to this study as it allows for the interpretation of economic models as structural equations, and it is extremely consistent. It suggests that even with a small sample, the analysis can be very informative about the co-integration relations (Lewis-Beck et al., 2004). According to Sage's Encyclopaedia of social science, when a linear combination of nonstationary variables is stationary, these variables are cointegrated. Also, the vector that identifies the stationary linear combination becomes the co-integration vector. This method allowed the researchers to establish a long-term relationship between the study variables, with any short-term deviation being stationary.

The study variables are nonstationary macroeconomic variables and can meet the random walk description as such regression models on such nonstationary variables break down. Regressing one nonstationary series on another nonstationary series can result in spurious results (Cromwell et al., 1994). Differencing the variables before regressing also can potentially lose some relevant information, which is undesirable in this case. This study assessed the determinants of deposits in Ghana. Deposit refers to the total deposits in banks, savings and loan companies, rural banks, and microfinance institutions. The research used time series data on macroeconomic variables over six years, from 2015 to 2020. This period provided sufficient observations to estimate the parameters of the econometric model with reasonable accuracy. With a shorter study period, data would have been insufficient to identify the long-run relationships among the variables. In comparison, a longer period could have been affected by structural changes in the economy that could invalidate the assumptions of the cointegration approach. The study period assisted the researchers in capturing the data's cyclical and seasonal patterns.

Macroeconomic variables such as GDP, inflation, and interest rates often exhibit cyclical and seasonal patterns that may affect the long-run relationships among the variables. We were able to capture multiple cycles and seasons, improving the robustness of the econometric results. Gretl was employed for the analysis

of the data due to its superior analytical capacity in econometrics variables. The macroeconomic variables used in this study were Inflation (I), Monetary policy rate (MPR), Gross International Reserve (GIR), Public debt (PD), Gross Domestic Product (GDP), GSE All share Index (GASI), Rate of change in Total Money supply (M2+), and deposits in the banking sector (TD). We adopted the model employed by Larbi-Siaw and Lawer (2015).

$TD_t = \int(I, MPR, GDP, GIR, PD, GASI, M2)$ ----------(1)

TD is the dependent variable, representing all banking deposits in all banks, savings and loans, rural banks, and microfinance institutions, be it savings, demand deposits, or fixed deposits. The independent variables were Inflation (I), monetary policy rate (MPR), Gross Domestic Product (GDP), Gross international reserve (GIR), Public debt (PD), GSE All share Index (GASI).

Change in Total money supply (M2+), From our review of the literature, we expected an inverse relationship between deposits in the banking sector (TD), Inflation (I), Public debts (PD), and GSE All Share index (GASI). Inflation was expected to negatively relate to deposits as higher prices lead to more money chasing the same goods. As such, more money is expected to move from the banking sector when Inflation increases. As the government borrows more from the public market, we expect an inverse effect on the level of deposits in banks. An increase in the All-share index attracts investors to withdraw savings and invest in stock markets leading to a decline in the level of banks deposit. We also expected a positive relationship between deposits in the banking sector (TD) and the monetary policy rate (MPR), Gross International Reserve (GIR), Gross Domestic Product (GDP), and Change in Total Money Supply (M2+). Table 1 shows the study variables with the expected direction of the relationship and the measurement unit for each of them.

Table 1: Study variable, Unit of Measure, and Expected Direction

Study Variable	Unit of Measure	Expected Direction
TD	Currency (GHC)	
I	Percentage	Negative
PD	Currency (GHC)	Negative
MPR	Percentage	Positive
GDP	Numeral	Positive
GIR	Numeral	Positive
GASI	Numeral	Negative
M2+	Percentage	Positive

The study variables under consideration are examined against time to determine a trend of I, MPR, GDP, GIR, PD, GASI, M2+, and TD. This research utilized monthly data for six years from 2015 to 2020 obtained from the Bank of Ghana monetary time-series database. Since monthly data includes short-term economic fluctuations that annual data might overlook, it paints a more accurate picture of the state of the economy. Monthly data can provide a more detailed analysis of economic trends and patterns, allowing for a more nuanced understanding of the economy. Also, monthly data leads to improve economic forecasting by providing more timely and accurate information about economic trends. That is particularly important for policymakers who need to make decisions considering all economic conditions. Using monthly data ensured a more accurate and detailed analysis of the macroeconomic relationship at play in Ghana.

4. Data Analysis and Findings

The study presented a graphical analysis of the data to determine the trend of movement among the study variables. It also examined the trend of the individual study variables. These graphical analyses are presented in Figures 1 and 2.

Figure 1: Relationship between Study Variables

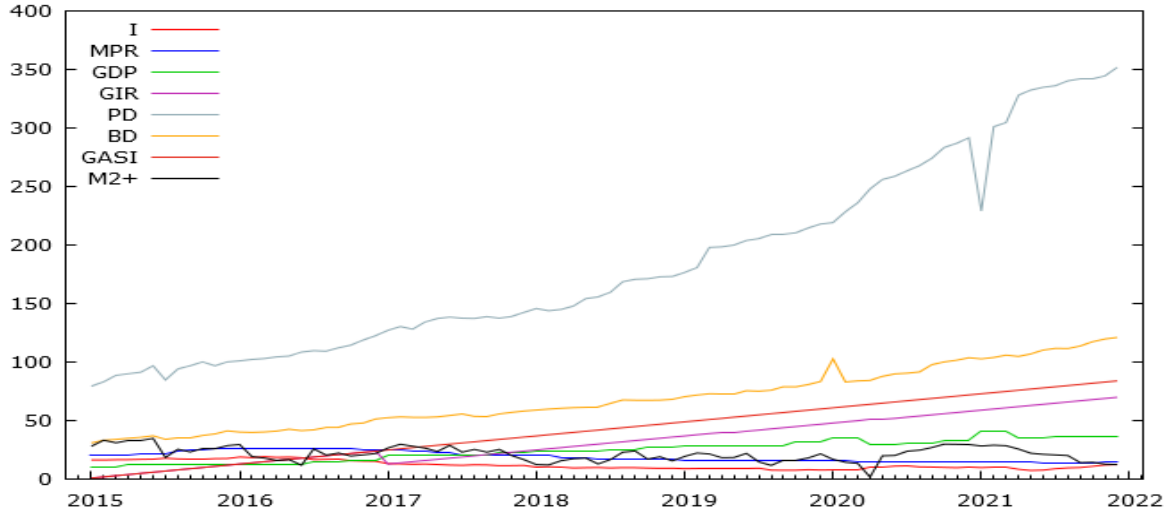
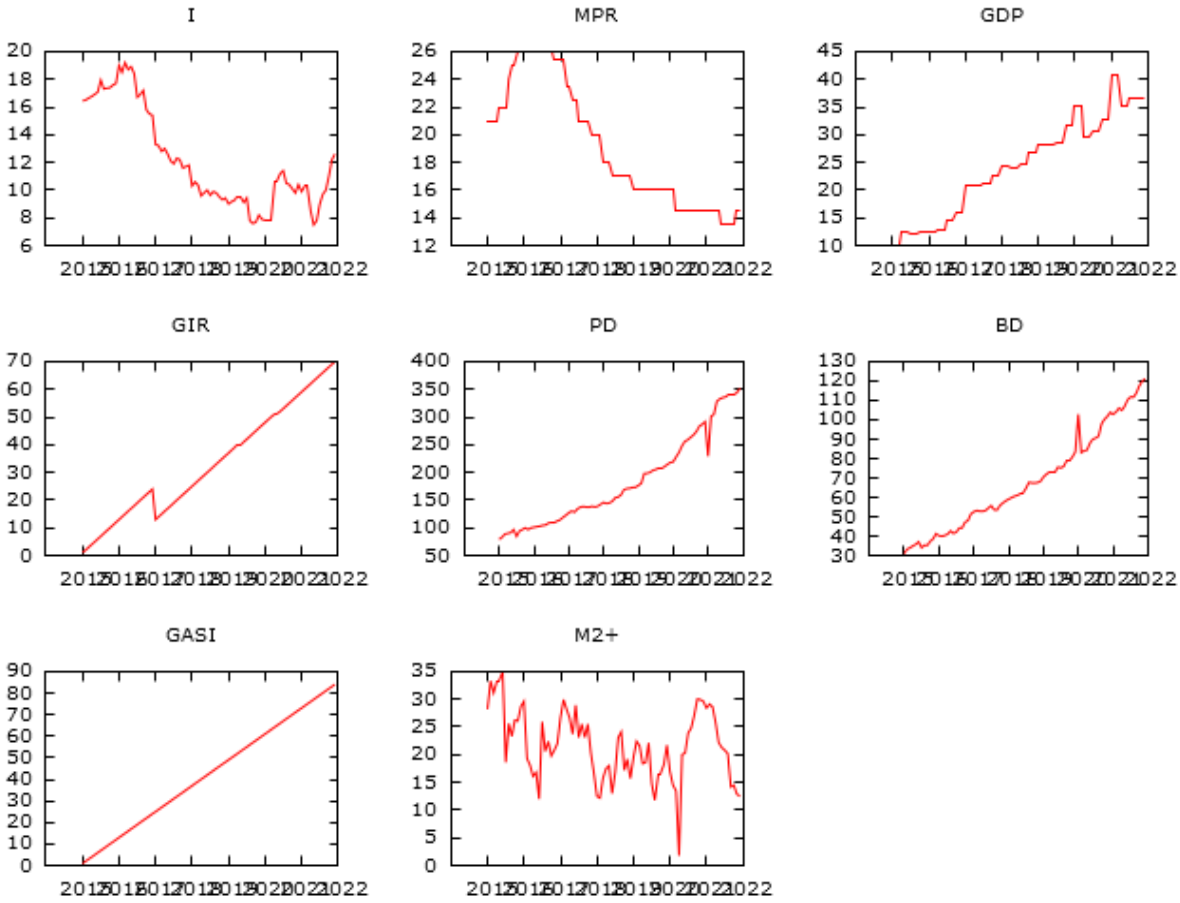


Figure 2: Trend of Study Variables Individually



Augmented Dicky Fuller Test (ADF): We used the ADF test to determine whether the study variables are stationary, analyzing stationery in the study data series and avoiding any autocorrelation in the study variables. ADF is a unit root test and a statistically significant test for determining stationarity in the variables. The results are summarized in Table 2.

Table 2: ADF Test for Unit Root

Variable	P- Value	Level of Integration
I	0.988	I(1)
PD	0.875	I(1)
MPR	0.217	I(1)
GDP	0.753	I(1)
GIR	0.734	I(1)
GASI	0.248	I(1)
M2+	0.127	I(1)
TD	0.922	I(1)

When conducting an Augmented Dickey-Fuller (ADF) test, the null hypothesis is formulated based on the assumption that a unit root is present in the time series data. As summarised in Table 2, the ADF results showed that the p-value for the dickey-fully unit root test is large for all the study variables. As such, we fail to reject the Null hypothesis for all the study variables. The study variables are nonstationary. The variables had to be differenced to make them stationary. That indicates that d=1 in all the study series. We performed the co-integration regression using the total deposit as the dependent variable, as all variables are integrated in the same order using the Engle-Granger Test.

Engle-Granger Test: The Engle-Granger test is used to test the co-integration relationship between the study variables in the long run. This method assumes variables to be stationary at the same level. The Engle-Granger test involved determining a static regression model with bank deposits as the dependent variable and running an auxiliary time series to test whether the residuals are stationary. The result of the Engle-Granger test is summarised in Table 3.

Table 3: Engle-Granger Test

	Coefficient	Std. Error	T-ratio	P-value
Const	−2.60363	5.57835	-0.4667	0.6420
I	0.617822	0.295406	2.091	0.0398
MPR	-0.005165	0.188052	-0.02747	0.9782
GDP	0.828203	0.196760	4.209	0.0000
GIR	0.145065	0.150818	0.9619	0.3392
PD	0.127329	0.2200203	5.782	0.0000
GASI	0.300418	0.169951	1.768	0.0811
M2+	0.106906	0.0602488	1.774	0.0800

Engle-Granger Test results indicated that the calculated test statistic value of -7.46091, with an associated p-value of 0.0002, is statistically significant at the 5% level. As a result, we rejected the null hypothesis, which assumes the presence of a unit root in the time series data. Therefore, we concluded that the series exhibit cointegration. The regression coefficients suggested that changes in total deposits in the banking sector in Ghana are significantly and positively influenced by the Rate of Inflation (I), Gross Domestic Product (GDP), and Public Debt level (PD). That indicated that these are the major determinants of total deposit levels in the Ghanaian banking sector. Monetary policy rate had an insignificant negative relationship with deposit levels in banks in Ghana, suggesting that it does not influence the level of deposits. Similarly, Monetary Policy Rate, Gross International Reserve, GES All Share Index, and percentage change in money supply were insignificant relative to total bank deposits but positively related. All had no major influence on the level of deposits in banks in Ghana. The descriptive statistics of the Engle-Granger test are presented in Table 4.

Table 4: Descriptive Statistics – Engle-Granger Test

Statistic	Coefficient	Statistic	Coefficient
Mean dependent var	68.23333	Log-likelihood	-200.4169
S.D. dependent var	25.53343	Akaike criterion	416.8339
Sum squared resid	581.0120	Schwarz criterion	436.2804
S.E. of regression	2.764940	Hannan-Quinn	424.6512
R-squared	0.989263	Rho	0.178845
Adjusted R-squared	0.988274	Durbin-Watson	1.619854

Estimating the Error Correction Model: We examined the short-run error correction model embedded in the relationship between I(0) variables of our co-integration relationship. The error correction models were used to estimate the speed at which deposits in the banking sector return to equilibrium from changes in the I, PD, MPR, GDP, GIR, GASI, and M2+. This model enabled us to analyze the short-run effect of the study variables. We utilized the residuals from the ordinary least square model as e_1. We also defined the first differentiation of the study variable as d_TD, d_I, d_PD, d_MPR, d_GDP, d_GIR, d_GASI, and d_M2+. We lagged each variable by 1 represented as d_TD_1, d_I_1, d_PD_1, d_MPR_1, d_GDP_1, d_GIR_1, d_GASI_1, d_M2+_1. Table 5 displays the outcome of the error correction model.

Table 5: Result of Error Correction Model

	Coefficient	Std. Error	T-ratio	P-value	
d_GASI_1	1.57641	0.472486	3.336	0.0013	***
d_I_1	−0.262474	0.509942	−0.5147	0.6083	
d_MPR_1	0.259568	0.587957	0.4415	0.6602	
d_GDP_1	−0.479569	0.282002	−1.701	0.0933	*
d_GIR_1	−0.140915	0.272488	−0.5171	0.6066	
d_PD_1	−0.0689878	0.0360108	−1.916	0.0593	*
d_M2+_1	0.0830009	0.0753923	1.101	0.2745	
e_1	−0.636669	0.185104	−3.440	0.0010	***
d_BD_1	−0.0294727	0.136911	−0.2153	0.8302	

The variable of interest in this error correction model is e_1, which is, in this case, statistically significant. The p-value for e_1 is 0.0010, which means that bank deposit is strongly exogenous and moves to restore equilibrium with the other identified determinants of bank deposit level in Ghana. The e_1 coefficient of -0.637 also explains the speed of adjustment in the short-run towards the long-run equilibrium through several short-run partial adjustments. Table 6 displays the descriptive statistics of the error correction model.

Table 6: Descriptive Statistic of Error Correction Model

Mean Dependent Var	1.070732	S.D. Dependent Var	3.366630
Sum squared resid	620.9121	S.E. of regression	2.916444
R-squared	0.323677	Adjusted R-squared	0.249559
F(8, 73)	4.367065	P-value(F)	0.000242
Log-likelihood	−199.3562	Akaike criterion	416.7125
Schwarz criterion	438.3730	Hannan-Quinn	425.4088
Rho	−0.035880	Durbin-Watson	2.054624

5. Conclusion

The ADF results suggested that the study variables of I, PD, MPR, GDP, GIR, GASI, M2+, and TD were nonstationary. They, however, became stationary after the differentiation. Only I, GDP, and PD levels were found to have significant positive effects on the level of deposits in the banking sector in Ghana. Growth in GPD significantly improves the level of deposits in banks in Ghana. The co-integration regression suggested a long-run negative relationship between the monetary policy rate and total deposits in the banking sector, although be it insignificant. This relationship is consistent with the findings of Drechsler et al. (2017), although they observed a significant relationship. The results also suggested an insignificant positive long-run relationship between Gross International Reserve, GES all share index, and change in money supply and total deposits in the Ghanaian banking sector. This relationship is contrary to Larbi-Siaw and Lawer (2015), who using annual figures, found a negative relationship between changes in money supply, GES all share index, and monetary policy rate and deposits in the banking sector in Ghana. In the immediate term, the significance of the error correction term facilitates a prompt convergence toward the long-run equilibrium.

That suggested that a long-run equilibrium influences the movement of the study variables. The GES all-share index in the short term significantly positively relates to total deposits in the banking sector in Ghana. However, in the distant future, the GES all-share index did not significantly influence the demand levels in banks, although the relationship is still positive. Further analysis of the study variables in the light of the monetary theory of economics can be used by policyholders as a measure to control the inflation rate. For a developing country like Ghana, the findings suggest a comprehensive economic reform policy of a mixture of monetary and fiscal policies as well as structural policies to reduce inflation and national debt to promote economic growth. An increase in the monetary policy rate could lead to a reduction in inflationary pressure and stabilize prices. As per the study findings, such a policy will lead to a decline in bank deposits but will increase confidence in the economy, which has the potential for increased investment and savings.

Fiscal policies such as reducing public spending and increasing tax revenues can help reduce budget deficits and borrowing needs, thereby reducing public debt. That could also promote greater macroeconomic stability and improve the efficiency of the financial system. Structural policies such as promoting greater financial inclusion and financial education, expanding infrastructure, and reducing bottlenecks to trade and investment can help nurture economic growth and long-term development. This could create a more favorable environment for savings and investments and further stimulate economic activity. Reduced inflation may come with some short-term adjustment costs, like a drop in total bank deposits and increased uncertainty among investors and consumers. However, over the long run, these measures might support increased fiscal stability, lower levels of public debt, and advance sustainable economic growth and development.

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