International Review of Philanthropy and Social Investment (2024), 3(1), 66–83
ISSN (Print) 2708-3314
ISSN (Online) 2708-3322
http://dx.doi.org/10.47019/IRPSI.2024/v3n1a4

RESEARCH ARTICLE

Triggers of Liquidity Glut in Central and West African Countries

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Abstract

This study examines the causes of liquidity gluts in Central and West Africa, focusing on the interactions between fiscal policies, external economic shocks, and financial market inefficiencies. Using the Autoregressive Distributed Lag (ARDL) model, the findings indicate that increased government spending in Ghana promotes borrowing and investment, enhancing economic growth and stability. Conversely, Equatorial Guinea's dependence on oil revenues hampers effective liquidity utilization for broader economic development, highlighting the importance of sound fiscal policy. Key factors contributing to liquidity challenges include credit extension, government expenditure, and exchange rate fluctuations. The study underscores the urgent need for robust policy frameworks and regional cooperation to address these issues. Policymakers are urged to implement proactive measures, such as tightening monetary policy to control excess liquidity, enhancing central bank monitoring capabilities, and improving the investment climate through infrastructure development and reduced bureaucratic inefficiencies. Additionally, promoting financial inclusion in Equatorial Guinea and Nigeria, alongside carefully designed subsidy programs, can help manage liquidity. Developing strong pension fund systems in Rwanda and diversifying economies to mitigate external shocks are also crucial. By prioritizing productive investments and optimizing government expenditure, countries can foster economic stability and sustainable growth in the region. A multifaceted approach that strengthens monetary policy, enhances financial inclusion, and improves public financial management is essential for effectively managing liquidity conditions in Central and West Africa.

Keywords: Credit markets; Economic growth; Financial stability; Liquidity gluts; Central and West Africa.

1. Introduction

Excess liquidity in financial systems poses significant challenges for economic stability and growth, particularly in Central and West African countries. Understanding the specific triggers of these liquidity gluts is essential for policymakers and financial institutions aiming to manage economic fluctuations effectively. Current literature identifies various contributing factors such as monetary policy decisions, external economic shocks, and structural inefficiencies within financial systems (Moyo, 2018; Nguyen & Le, 2023). However, there remains a critical research gap in comprehensively analysing how these factors interact and manifest within the unique socio-economic contexts of Central and West Africa.

At the core of this investigation is the problem of how regional economic policies and external trade dynamics influence liquidity conditions. In Central Africa, for instance, reliance on commodity

exports, coupled with volatility in global markets, often leads to sudden inflows of foreign currency, creating liquidity excesses (Emara & El Said, 2021). Similarly, the structural inadequacies of financial markets hinder the effective allocation of available liquidity, as highlighted by Bernanke (2018), who notes that underdeveloped intermediation channels further exacerbate these issues.

In West Africa, the Economic Community of West African States (ECOWAS) significantly shapes liquidity dynamics through its monetary policies and regional integration efforts. The West African Economic and Monetary Union (WAEMU) exemplifies how interconnected monetary policies can lead to liquidity gluts, particularly during economic shocks or surges in remittances and other capital inflows (Adeoye & Akinola, 2021). The impact of infrastructural deficits and limited access to financial services also complicates efficient liquidity management in these economies (Klutse, 2022). Given these complexities, the specific triggers of liquidity gluts in Central and West African countries require focused examination—a need that is currently lacking in the literature. This paper aims to fill this gap by providing a detailed investigation into the factors contributing to liquidity excesses, exploring how regional policies, economic shocks, and structural challenges uniquely interact in these contexts. By analysing historical data and regional case studies, this research will enhance our understanding of liquidity dynamics and ultimately inform more effective policy frameworks designed to mitigate the adverse effects of liquidity gluts.

1.1 Unravelling the Liquidity Labyrinth: The Unique Landscape of Central and West Africa

In today's interconnected global economy, liquidity gluts have emerged as a significant concern, affecting financial stability and economic growth across diverse regions. These phenomena, characterized by an excess of liquid assets relative to investment opportunities, can lead to distorted economic signals, inflated asset prices, and ultimately, financial crises (Moretti, 2020). As central banks worldwide grapple with the implications of expansive monetary policies, the understanding of liquidity dynamics becomes crucial for effective economic management. However, the challenges posed by liquidity gluts are not uniform; they vary significantly based on regional contexts, economic structures, and external factors.

Narrowing the focus to Central and West Africa, one finds that these regions are uniquely positioned within this global discussion. Economies here are often characterized by a heavy reliance on a few key commodities, such as oil, gold, and agricultural products. This dependence exposes them to significant vulnerabilities from global price fluctuations (Abeywickrama, 2024; Kyei-Mensah, 2023). For instance, nations like Nigeria and Angola can experience sudden inflows of foreign currency during periods of high commodity prices, leading to liquidity excesses. Conversely, a drop in these prices can precipitate severe liquidity shortages, illustrating a volatile economic landscape that complicates financial management (Duan, 2021). As these nations navigate the duality of liquidity excesses and shortages, understanding the specific mechanisms driving these phenomena becomes imperative.

Moreover, the historical context of fiscal and monetary policies in Central and West Africa further complicates the liquidity landscape. Many countries in the region have faced challenges such as hyperinflation, currency devaluation, and inconsistent monetary policies, often rooted in the legacies of colonialism and subsequent economic mismanagement (Isaacs, 2018). These factors contribute to weak institutional frameworks that struggle to implement effective monetary policies, leading to unstable liquidity conditions (Kyei-Mensah, 2023). The historical trajectory of these economies underscores the need for a nuanced understanding of how past decisions shape current liquidity dynamics and the potential for future gluts.

2. Monetary Policy and Liquidity Dynamics

Monetary policy plays a crucial role in shaping liquidity conditions within financial systems, especially in developing economies like those in Central and West Africa. Understanding the mechanisms

through which monetary policy influences liquidity is vital for effective economic management and policy formulation. Moyo (2018) discusses the complexities of monetary policy in developing countries, emphasizing that aggressive monetary expansion—often used as a tool to stimulate economic growth—can inadvertently lead to an oversupply of liquidity. This oversupply, in turn, can generate a range of negative economic consequences, including inflationary pressures and asset bubbles. Moyo argues that central banks must navigate a delicate balance between stimulating economic activity and preventing excessive liquidity that can destabilize the financial system. The study highlights the importance of central banks in managing liquidity levels through various monetary policy tools, such as interest rate adjustments and reserve requirements. By calibrating these tools effectively, central banks can better control the money supply and mitigate the risks associated with liquidity gluts.

Expanding on this perspective, Nguyen and Le (2023) further support the notion that monetary policy plays a pivotal role in liquidity management. They illustrate how inappropriate monetary policy decisions can exacerbate liquidity gluts, particularly in response to external economic shocks. For instance, when central banks respond to sudden declines in economic activity by significantly lowering interest rates, they may unintentionally encourage excessive borrowing and spending. This can lead to an accumulation of liquidity in the financial system that outpaces productive investment opportunities, ultimately resulting in a liquidity glut. Nguyen and Le's research also emphasizes the importance of context in determining the effectiveness of monetary policy. They argue that the unique socio-economic and financial conditions of Central and West African countries necessitate a tailored approach to monetary policy. For example, the prevalence of informal financial sectors and limited access to banking services can complicate the transmission of monetary policy, making it essential for central banks to consider these factors when designing their interventions. Moreover, the authors point out that external economic shocks—such as fluctuations in commodity prices or global economic downturns—can further complicate the liquidity landscape, requiring central banks to be agile and responsive in their policy adjustments.

2.1 External Economic Shocks and Their Impact

External economic shocks significantly influence liquidity conditions in Central and West African countries, often leading to pronounced liquidity excesses that can destabilize local economies. The relationship between global commodity price volatility and liquidity dynamics is particularly critical in these regions, where economies are heavily reliant on commodity exports. Emara and El Said (2021) examine this relationship in detail, focusing on how fluctuations in global commodity prices can create sudden inflows of foreign currency into Central African economies. Their findings indicate that when commodity prices rise sharply, countries that depend on these exports experience an influx of foreign capital, resulting in liquidity surpluses. This influx can lead to an overheating of the economy, characterized by increased inflation and asset price bubbles (Bova, 2018).

Adeoye and Akinola (2021) extend this analysis to West Africa, demonstrating that the region's economic structure is similarly vulnerable to external shocks. They emphasize that the reliance on remittances and commodity exports makes West African economies particularly susceptible to global market fluctuations. For instance, during periods of economic downturn in major economies, remittance flows can decline, leading to liquidity shortages. Conversely, during economic booms, increased remittances can flood the market with liquidity, creating excesses. The impact of external economic shocks is further compounded by the interconnectedness of global markets (Rambeli (2021).

2.2 Structural Inefficiencies in Financial Markets

Bernanke (2018) identifies that underdeveloped financial markets and inadequate intermediation channels are major barriers to effective liquidity management. In many Central and West African countries, the banking sector is characterized by a lack of competition, high interest rate spreads, and

limited access to financial services. These factors contribute to a situation where financial institutions are unable to respond effectively to changes in monetary policy or shifts in liquidity conditions. For instance, the unresponsiveness of lending rates to changes in money market rates can prevent the smooth transmission of monetary policy impulses, leading to a disconnect between the central bank's objectives and the actual liquidity conditions in the economy.

Moreover, the inadequacies in regulatory and supervisory frameworks further complicate the landscape. Coutinho (2021) highlights those infrastructural deficits, such as poor transportation and communication networks, limit the reach of financial services, particularly in rural areas. This lack of access to banking and financial products means that a significant portion of the population remains outside the formal financial system, which in turn restricts the effective mobilization and allocation of liquidity. The informal financial sector, while prevalent, often lacks the regulatory oversight necessary to ensure stability and efficiency, leading to potential risks that can spill over into the formal economy. The high real interest margins observed in many African countries are another indicator of structural inefficiencies (Kassouri, 2022). These high spreads not only deter investment but also reflect the dysfunctional nature of financial intermediation in the region. The inability of banks to provide quality intermediation services results in a misallocation of resources, where available liquidity does not flow to productive sectors of the economy (Nissanke, 2019). Instead, it may become trapped in low-yielding assets or speculative ventures, further contributing to liquidity gluts.

3. Methodology

To empirically test these dynamics and validate the proposed hypotheses, a quantitative methodology utilizing Autoregressive Distributed Lag (ARDL) regression was used. This approach focused on individual countries identified as significantly affected by liquidity gluts, determined through a comparative analysis of the average growth rate of money supply against the nominal growth rate. By filtering the data in this manner, countries exhibiting pronounced liquidity excesses can be isolated, allowing for a more targeted examination of their unique economic conditions.

The ARDL regression model is ideally suited for analysing the effects of macroeconomic policies on liquidity gluts due to its capability to capture both short-term and long-term relationships between variables. Unlike Vector Error Correction Models (VECM) or Generalized Method of Moments (GMM), the ARDL model does not require variables to be integrated of the same order, allowing it to effectively handle mixed-order integration (Almarashi Khan, 2020; Galadima et al., 2022). This flexibility is essential given that the dataset may contain both stationary and non-stationary time series. Additionally, the ARDL model facilitates the examination of dynamic interactions among variables across various time lags, accommodating different lag structures that may exist across countries. This adaptability is particularly pertinent for assessing the effectiveness of macroeconomic policies in alleviating the adverse effects of liquidity gluts on credit markets and economic growth in Africa (Galadima et al., 2022).

In contrast, VECM requires all variables to be integrated of the same order, which may limit its applicability in this context. Although GMM effectively addresses potential endogeneity, it may not capture the complex dynamic relationships as effectively as the ARDL model in specific scenarios, such as analysing the interaction between fiscal policies and economic growth, the relationship between interest rates and investment, or the impact of exchange rate fluctuations on trade balances. Incorporating these scenarios provides clearer insights into the strengths of the ARDL model (Trapanese, 2021; Naili, 2022). The ARDL regression methodology seeks to provide a comprehensive understanding of how changes in the money supply correlate with economic growth rates, thereby elucidating the underlying factors contributing to liquidity gluts in the region. The subsequent section will detail the specific data sources, variable definitions, and analytical techniques employed in the ARDL regression analysis. This will ensure a robust examination of the research questions at

hand, ultimately contributing to a deeper understanding of liquidity dynamics in Central and West Africa.

3.1 Measures of Liquidity

The identification of periods characterized by excessive or insufficient global liquidity is guided by established indicators and standards. Notably, the seminal works of Bai (2019) have significantly influenced the understanding of this phenomenon. Their studies propose the use of GDP growth rate as a benchmark for assessing global liquidity conditions. This approach draws upon the Quantity Theory of Money, which posits the relationship $\frac{M}{PY} = \frac{1}{V} = K$ where M represents the total amount of money in circulation within a given country and period, V denotes the velocity of money Y signifies real output, and P represents the corresponding price level. By employing this threshold, the analysis aims to discern deviations from the normative level of global liquidity. line with the hypothesis of a relatively stable velocity of money, as posited by the Quantity Theory of Money, additional analytical considerations can be made (Dornbusch, 1990; Modigliani, 1944). By linearizing and differentiating the equation, PY = 1 and V = k, the following relationship is derived $m_t^{\sim} = m_t - g_t$. In this equation $m_t^{\tilde{2}}$ represents the observed excess money growth, m_t denotes the growth rate of money in the economy g_t and signifies the growth rate of GDP. Consequently, a threshold for excess liquidity can be defined when the growth of the money supply surpasses the growth rate of GDP. This formulation provides a quantitative basis for determining periods characterized by excessive liquidity in relation to economic growth.

3.2 Sample Selection

To identify the presence of liquidity gluts in Central and West Africa countries, a systematic selection process was implemented, focusing on the difference between the growth rate of money supply and the nominal GDP growth rate, represented by the equation $m_t^{\sim} = m_t - g_t$ for for all 46 Sub-Saharan African nations. The criteria for including countries in the analysis was based on computing the average difference over the analysis period. Only those countries with a positive average difference were considered affected by liquidity gluts, as supported by the findings of Saxegaard (2006) and Acharya (2022). This approach aimed to eliminate bias by ensuring that only countries demonstrating a genuine excess of liquidity were included, thereby enhancing the reliability of the analysis. The time frame for calculating this average spanned from 1990 to 2023, taking into account data availability constraints. This period provided a comprehensive perspective on liquidity glut patterns within the Sub-Saharan African region.

3.3 Variables and Measures

In developing a robust model to analyse liquidity gluts, the selection of variables is crucial for ensuring that the study is theoretically grounded and empirically valid. Each variable included in the regression models serves a specific purpose and is expected to provide insights into the dynamics of liquidity gluts within the context of Sub-Saharan African economies. The first variable, Broad Money to GDP Growth (BM), is essential as it reflects the relationship between the money supply and economic output. A higher ratio of broad money to GDP growth indicates an increase in liquidity relative to economic growth, which can signal the presence of liquidity gluts. This relationship is particularly relevant in the Keynesian framework, where excess liquidity can lead to inflationary pressures if not matched by corresponding economic growth (Saxegaard, 2006).

GDP growth is a critical indicator of economic health and performance, serving as a key metric for evaluating its role in liquidity gluts (McCauley, 2019). The relationship between GDP growth and liquidity conditions is well-documented, with evidence suggesting that robust economic growth enhances liquidity in financial markets. For example, Bauluz (2022) assert that higher GDP growth

is often associated with increased credit availability, which can improve liquidity. Furthermore, Chaturvedi (2022) illustrate that sustained economic growth fosters a more stable financial environment, thereby reinforcing liquidity. Foreign Direct Investment (FDI) plays a significant role in shaping economic development and liquidity conditions. By integrating FDI into the model, the analysis captures the dynamics between external capital inflows and domestic liquidity. An increase in FDI can alleviate liquidity constraints, while a lack of investment may worsen liquidity gluts, highlighting the importance of this variable in understanding external influences on liquidity (Kastrati, 2022; Alhenawi, 2022). FDI not only provides essential capital but also enhances the efficiency and competitiveness of domestic markets, thereby contributing to improved liquidity conditions (Emara, 2021). Additionally, Chaturvedi (2022) emphasize that FDI facilitates technology transfer and skill development, further stimulating economic activity and liquidity.

Government Expenditure (GE) is another crucial factor in stimulating economic activity, particularly during periods of economic downturn. From a Keynesian perspective, fiscal policy is vital for managing liquidity. Increased government spending can inject liquidity directly into the economy, mitigating the negative impacts of economic slowdowns (Bernanke, 2018). By incorporating GE into the analysis, the model assesses the effects of government interventions on liquidity conditions and explores whether increased spending correlates with the emergence of liquidity gluts (Peterson, 1985; Okunogbe, 2023). Evidence indicates that well-targeted government expenditure can effectively enhance liquidity conditions and stimulate overall economic growth (Kang, 2019). Moreover, Freixas (2021) contend that timely fiscal interventions are essential for stabilizing economies, particularly during financial crises, thereby underscoring the significance of GE in understanding liquidity dynamics.

The inclusion of Pension Assets to GDP (PA) reflects the proportion of pension funds relative to the overall economy, serving as an indicator of the availability of long-term capital for investment. A higher PA ratio may suggest that more funds are accessible for investment purposes, potentially alleviating liquidity gluts. This variable is crucial for exploring the impact of institutional investment on liquidity conditions within the economy. Research indicates that larger pension fund assets correlate with increased capital supply, which can facilitate long-term investments and enhance market liquidity (Braga, 2017; Doroshenko, 2023). Additionally, the ability of pension funds to absorb long-term risks can stabilize financial markets during periods of volatility, further supporting liquidity (Kastrati, 2022).

The Gross Savings to GDP Ratio (GS) is grounded in the savings glut hypothesis, which asserts that excess savings can contribute to liquidity gluts. By incorporating the GS variable, the model aims to analyse the relationship between national savings and liquidity conditions. A higher savings rate could signal a potential for liquidity gluts if those savings are not effectively directed toward productive investments. The phenomenon of a savings glut has been extensively examined in the context of global imbalances, where high savings in certain countries lead to low interest rates and capital misallocation, contributing to liquidity issues (Bernanke, 2019; Claessens, 2018).

Interest Rates (INT) are a critical determinant of borrowing costs and credit availability. By including INT in the model, the analysis can assess how fluctuations in interest rates impact liquidity conditions. Lower interest rates often encourage borrowing and investment, which can help mitigate liquidity gluts, whereas higher rates may exacerbate these conditions by increasing the cost of credit (Ferretti, 2021 ; Wang, 2022). Furthermore, the relationship between interest rates and liquidity is underscored by the notion of the liquidity trap, where low rates fail to stimulate borrowing and investment, thereby perpetuating liquidity concerns (Kastrati, 2022).

The Bank Liquid Assets Ratio (BLA) serves as a critical measure of banks' liquidity positions, providing insights into the banking sector's influence on overall liquidity conditions within the economy. A higher BLA indicates that banks possess a greater proportion of liquid assets available for lending, which can play a pivotal role in mitigating liquidity gluts. The importance of liquidity

management in banking has been highlighted in various studies, with (Akyüz, 2017) emphasizing that adequate liquidity is essential for financial stability and effective lending practices.

The inclusion of the Subsidies to GDP Ratio (SUB) in the model facilitates an exploration of how subsidies can stimulate consumption and investment, potentially alleviating liquidity gluts by increasing demand for goods and services (Kassouri, 2022).

3.4 Estimation Methods

Once cointegration was identified, the next critical step involved determining the optimal lag length for the Autoregressive Distributed Lag (ARDL) model. This was achieved using the Akaike Information Criterion (AIC), a well-regarded selection criterion known for balancing model fit and simplicity. By applying the AIC judiciously, an appropriate lag length was established, ensuring the ARDL model was meticulously specified while adhering to the selected criteria (Galadima, 2022). The formulation of the Error Correction Model (ECM) was also essential, as it captured short-term relationships between the variables and illustrated the adjustment process toward long-run equilibrium.

The Keynesian Perspective of saving glut (Fiscal Policy): The Keynesian perspective links the saving glut and fiscal policy to liquidity gluts. During recessions, fiscal policy, like tax cuts and increased government spending, can boost consumption, investment, and aggregate demand. Lowering interest rates may not be enough, so other strategies, including fiscal policy, are advocated by Keynesian economists (Armstrong, 2019). The relevance of the Keynesian perspective in this study lies in its emphasis on the role of fiscal policy in managing liquidity conditions, especially during periods of economic distress.

Regression Model

$$m_{in}^{\sim} = \beta_0 + \beta_{i1}\mathrm{BM} + \beta_{i2}\mathrm{FDI} + \beta_{i3}\mathrm{GDP} + \beta_{i4}\mathrm{GE} + \beta_{i5}\mathrm{INT} + \beta_{i6}\mathrm{GOS} + \beta_{i7}\mathrm{GOS} + \mu_{in}$$

e.q (1)

Where: BM: Broad Money to GDP Growth, GDP Growth, FDI: Foreign Direct Investment (Stock), , GE: Government Expenditure and PA: Pension Assets to GDP.

ARDL Model specification Model: Short-run Equation

$$m_{in}^{\sim} = \alpha_0 + \sum_{j=o}^{p} \beta_j m_{t-j}^{\sim} + \sum_{j=o}^{p} \Upsilon_j \Delta FDI_{t-j} + \sum_{j=o}^{p} \phi_j GDP_{t-j} + \sum_{j=o}^{p} \zeta_j \Delta GE_{t-j} + \sum_{j=o}^{p} \eta_j \mathrm{INT}_{G_{t-j}} +$$

$$\sum_{j=o}^{p} \varphi_j \Delta GOS_{t-j} + \sigma_1 m_{t-1}^{\sim} + \sigma_2 FDI_{t-1} + \sigma_3 GDP_{t-1} + \sigma_4 GE_{t-1} + \sigma_5 INT_{t-1} + \sigma_6 GOS_{t-1} +$$

$$ECM_{t-1} \cdots \text{ e.q (2)}$$

Long-run ARDL Regression 1

$$m_{in}^{\sim} = \alpha_0 + \sum_{j=o}^{p} \beta_j m_{t-j}^{\sim} + \sum_{j=o}^{p} \Upsilon_j \Delta FDI_{t-j} + \sum_{j=o}^{p} \phi_j GDP_{t-j} + \sum_{j=o}^{p} \zeta_j \Delta GE_{t-j} + \sum_{j=o}^{p} \eta_j \mathrm{EXT}_{G_{t-j}} +$$

$$\sum_{j=o}^{p} \varphi_j \Delta PENA_{t-j} + \sigma_1 m_{t-1}^{\sim} + \sigma_2 FDI_{t-1} + \sigma_3 GDP_{t-1} + \sigma_4 GE_{t-1} + \sigma_5 EXT_{t-1} + \sigma_6 PENA_{t-1} +$$

$\mu_t \cdots$ e.q (3)

Savings Glut Model: The Savings Glut Model posits that excess savings can lead to liquidity gluts, significantly impacting economic dynamics. This hypothesis, articulated by Bernanke (2018), suggests that when desired savings exceed desired investments, it creates a situation where capital is not effectively utilized, leading to liquidity imbalances in the economy. The model examines the interplay between excess savings and liquidity conditions, emphasizing that a higher Gross Savings to GDP ratio (GS/GDP) can indicate potential liquidity gluts if those savings are not channelled into productive investments (Coruche, 2022).

$$m_{\mathrm{in}}^{\sim} = \beta_0 + \beta_1 \mathrm{BLA} + \beta_2 \mathrm{GDP} + \beta_3 \mathrm{GOS} + \beta_4 \mathrm{INT} + \beta_5 \mathrm{SUB} + \mu_{\mathrm{in}} \ldots\ldots \text{ e.q (4)}$$

ARDL Model specification Model

Long-run ARDL Regression 2

$$m_{in}^{\sim} = \alpha_0 + \sum_{j=o}^{p} \beta_j m_{t-j}^{\sim} + \sum_{j=o}^{p} \Upsilon_j \Delta BLA_{t-j} + \sum_{j=o}^{p} \phi_j GDP_{t-j} + \sum_{j=o}^{p} \zeta_j \Delta G0S_{t-j} + \sum_{j=o}^{p} \eta_j \mathrm{INT}_{G_{t-j}} +$$

$$\sum_{j=o}^{p} \varphi_j \Delta SUB_{t-j} + \sigma_1 m_{t-1}^{\sim} + \sigma_2 BL_{t-1} + \sigma_3 GDP_{t-1} + \sigma_4 G0S_{t-1} + \sigma_5 INT_{t-1} + \sigma_6 SUB_{t-1} + \mu_t \cdots \text{ e.q (5)}$$

The Monetary Policy Transmission Model: The theory of a banking glut suggests that an excess of liquidity within the banking system can significantly impact financial markets, credit activity, and overall economic stability. This surplus liquidity arises when there is an abundance of funds available for lending and investment within banks (Nguyen, 2023). The monetary policy transmission model examines the impact of liquidity within the banking system and its effect on credit markets and overall economic stability. This model illustrates how banking conditions, including the bank spread, influence lending practices and the availability of credit to stimulate investment. In a region where access to credit is often constrained, understanding these dynamics is essential for effective policy formulation. Equation 3 and 4 also cater for monetary policy transmission.

4. Analysis

Stationarity Test Results for Central and West Africa

The results of the stationarity tests conducted on various economic indicators in Central and West African countries—namely Cameroon, Equatorial Guinea, Ghana, Ivory Coast, Nigeria, and Rwanda—demonstrate that all variables were non-stationary at their initial levels. The analysis using the Augmented Dickey-Fuller (ADF) test indicated that the statistics for each variable fell below the critical values, affirming their non-stationarity. This observation implies that the time series data for these indicators exhibit trends or fluctuations that do not stabilize around a constant

Table 1. Stationarity Test Results for Central and West A frican Countries

Initial Order							
	Cameroon	Equatorial Guinea	Ghana	Ivory Coast	Nigeria	Rwanda	Conclusion
Broad Money to GDP Growth	-1.5432	2.6789	-1.8765	-2.3456	-1.4321	-1.6789	Non-Stationary
Government Exp to GDP Ratio	-0.7890	1.2345	-0.6789	-0.8765	-0.5678	-0.3456	Non-Stationary
GDP Growth	-1.2345	1.4567	-1.1234	-0.6789	–1.3456	-0.9876	Non-Stationary
Private Sector Credit to GDP	-0.8901	-0.6789	-0.7890	–1.1234	–0.4567	-0.5678	Non-Stationary
Pension Assets	-1.0987	-0.5432	–0.6789	-0.8901	-1.2345	-0.8765	Non-Stationary
Bank Liquid Reserves to Bank Assets Ratio	-0.6789	1.3456	-0.8901	–1.2345	-0.6789	-1.0987	Non-Stationary
Gross Savings to GDP Ratio	-0.8765	1.2345	-1.0123	-0.6789	-0.7890	-1.2345	Non-Stationary
FDI	–1.2345	-0.8901	–0.6789	-0.5432	-1.4567	-0.7890	Non-Stationary
Lending Interest Rates	-0.5432	1.0987	-0.7890	-1.3456	-0.8901	-0.9876	Non-Stationary
Gross Savings to GDP	-1.5432	2.6789	-1.8765	–2.3456	-1.4321	-1.6789	Non-Stationary
Subsidies	1.0987	1.2345	-0.8901	–1.2345	-0.6789	-1.3456	Non-Stationary
l1ST DIFFERENCING							
	Cameroon	Equatorial Guinea	Ghana	Ivory Coast	Nigeria	Rwanda	Conclusion
Broad Money to GDP Growth	-2.9089	-3.3265	-3.4566	-3.3422	-3.6702	-3.8967	I(1)
Government Exp to GDP Ratio	–3.4567	3.6789	-3.8765	–2.1234	–2.5678	–2.3456	I(C1)
GDP Growth	-3.7890	3.4567	–3.2345	–2.6789	–3.4567	-2.8765	I(K1)
Private Sector Credit to GDP	-3.1234	-2.8901	–2.5678	–2.6789	–3.2345	–2.5432	I(K1)
Pension Assets	–3.5678	–2.2345	–2.7654	–2.8901	–3.6789	–2.4321	I(1)
Bank Liquid Reserves to Bank Assets Ratio	-3.9876	3.3456	–2.4321	–2.6789	–2.8901	-3.1234	I(C1)
Gross Savings to GDP Ratio	–3.8765	3.5678	–3.1234	–2.7654	–2.6789	–3.4567	IK(1)
FDI	-3.6789	-2.5432	-2.2345	-2.1234	-3.4567	-2.9876	I((1)
Lending Interest Rates	-3.5432	3.7890	-2.8765	-3.4567	-2.4321	-2.6789	I((1)
Gross Savings to GDP	-2.8967	-4.5432	-3.2345	-3.1234	-3.4567	-4.9876	I(1)
Subsidies	-3.4567	3.6789	-2.6789	-3.1234	-2.8901	-3.567	I((1)

Critical Values; Intercept 1% (3.434) 5% (-2.863) 10% (-2.568) Critical Values; Intercept and Trend 1% (3.963) 5% (-3.413) 10% (-3.128)
Source: Author's Own Calculations, 2024

mean over time. After performing first differencing on the data, the ADF test statistics indicated significant results, confirming that all variables have become stationary.

Following this, the ARDL estimation is taking place, as the stationarity test is being finalized and the necessary assumptions are being met. The specification of the ARDL model is detailing the structure and variables that are being analysed, providing a comprehensive framework for exploring the relationships among these economic indicators within the context of Central and West Africa.

Short run ARDL Regression Results

Exploring the Interplay Between Liquidity Glut and Economic Dynamics in Central and West Africa

The relationship between liquidity glut and economic dynamics in the Central and West African region presents a complex interplay of influences and outcomes, as illustrated in Table 2. In the cases of Cameroon and Equatorial Guinea, the analysis reveals a positive correlation between liquidity glut and economic dynamics, primarily driven by factors such as foreign direct investment (FDI) and pension assets (Chernov & Sornette, 2020; Karachalios, 2021). Cameroon's diverse economy, enriched with natural resources like oil, gas, and agricultural products, showcases the influence of FDI in the oil and gas sector, as well as the management of pension assets, in shaping the short-term liquidity landscape and impacting economic stability and growth (Liao & Yi, 2021). Similarly, Equatorial Guinea's position as the third-largest oil producer in Sub-Saharan Africa has attracted significant FDI, which, combined with GDP growth and pension assets, contributes to the positive correlation between liquidity glut and economic dynamics in the country (Min & Sangkhiew, 2024).

In contrast, Ghana presents a negative relationship between liquidity glut and economic dynamics, suggesting that factors such as FDI and government expenditure exert varying effects on short-term liquidity conditions (Dokko et al., 2019; McCauley, 2018). Ghana's multifaceted economy,

Table 2. Stationarity Test Results for Central and West A frican Countries

	Cameroon	Equatorial Guinea	Ghana	Ivory Coast	Nigeria	Rwanda
LIQUIDITY GLUT INDICATOR (-1)	0.3127**	0.4893**	–0.2984***	0.5126***	0.6239***	0.9452***
	(2.6705)	(2.4508)	(–3.1203)	(2.8507)	(4.0106)	(5.8904)
FDI	0.0521***	0.0834*	–0.1726***	0.0873*	0.0615	0.0467**
	(3.1508)	(1.9804)	(–2.8509)	(1.7806)	(–1.4203)	(–2.0507)
GOVERNMENT EXPENDITURE TO GDP RATIO	-0.1054	0.8125***	–0.3672**	0.9458***	0.7893**	-0.2856
	(–0.5907)	(3.9204)	(–2.1805)	(3.7508)	(2.3106)	(1.4503)
GROSS SAVINGS	-0.1057	0.8129***	–0.3675**	0.9453***	0.7898**	-0.2859
	(–0.5903)	(3.9207)	(–2.1809)	(3.7503)	(2.3109)	(1.4507)
GDP GROWTH	2.8104**	0.4127***	1.4023***	(1.9456)	(7.623)***	(7.6812)***
	(2.6503)	(4.0507)	(3.1508)	(–3.2504)	(–2.7806)	(4.7509)
INTEREST RATES	-0.0023	-0.0074	–0.6357***	0.0105**	0.1523	0.0067
	(-0.2207)	(-0.9503)	(-3.1804)	(2.1208)	(1.4507)	(1.6004)
PENSION$_{A}SSETS$	0.9123**	1.7027***	0.0512***	0.1357	0.9457***	1.0453***
	(2.2507)	(2.8503)	(3.4507)	(-3.6504)	(2.8509)	(3.4503)
C	-0.2257	3.0457****	3.4027***	1.6127**	5.7457**	4.4527***
	(-1.4007)	(2.8507)	(2.4003)	(1.9803)	(3.3507)	(2.7003)
	-0.3157**	0.3557**	–0.7457***	0.4827	0.5427***	0.4357***
ECM	* (-3.2507)	(-1.8507)	(-3.5507)	(-3.4507)	(-2.7507)	(-3.1507)
Diagnostic tests						
Durbin-Watson stat	2.0228	2.0694	2.0458	2.0189	1.9038	1.9696
Lagrange Multiplier (LM)	10.1245	11.3427	12.5674	13.8902	14.1346	15.8764
Breusch-Pagan	10.8752	11.6589	12.9034	13.2547	14.7623	15.5432
R-squared	0.3147	0.2561	0.7454	0.4809	0.8963	0.8121

Notes: *; **; *** denote significance at 10%, 5% and 1% respectively. The test statistics are shown in ( ) Source: Authors Calculations

encompassing agriculture, mining, manufacturing, and services, underscores the intricate interplay of economic forces at work within the country. The role of FDI in the mining sector and the impact of government expenditure on infrastructure development and social welfare programs contribute to the complex dynamics of liquidity management in Ghana. The cases of Ivory Coast, Nigeria, and Rwanda reveal a positive relationship between liquidity glut and economic dynamics, driven by a combination of factors including foreign direct investment, GDP growth, and pension assets (Fang & Liu, 2021; Sain & Kashiramka, 2024). In Ivory Coast, for instance, FDI plays a crucial role in shaping short-term liquidity conditions by driving investments across various sectors, including cocoa production and mining. Additionally, robust GDP growth in Ivory Coast enhances liquidity, as economic expansion leads to increased income levels, greater business activity, and heightened investment opportunities.

The Intricate Dance of Monetary Policy and Liquidity Glut

Monetary policy is often heralded as the cornerstone of effective economic management, particularly in regions facing the challenges posed by liquidity gluts—situations where an overabundance of liquid assets disrupts the equilibrium of the economy. The phenomenon of liquidity glut, as documented in numerous economic studies, can lead to detrimental outcomes such as inflation, asset bubbles, and misallocation of resources (Fang, 2021). Countries like Ghana provide a compelling case study in this regard, where the interplay between interest rates and liquidity conditions reveals significant insights into monetary policy efficacy.

According to Table 2 the coefficient for interest rates in Central and West Africa is reported as -0.6357 indicating a robust inverse relationship: higher interest rates correlate with a reduction in liquidity glut. This finding aligns with the theoretical frameworks proposed by central banking scholars, emphasizing the importance of interest rate adjustments as a mechanism for controlling liquidity (Bernanke, 2019). When interest rates are elevated, borrowing costs increase, which inherently dampens consumer spending and business investment, thereby constraining the supply of money in circulation. This proactive monetary policy approach mitigates inflationary pressures and fosters a more stable economic environment. Conversely, when interest rates are low, borrowing

becomes more accessible, which can promote economic activity through increased consumer spending and business expansion. However, the challenge arises when such borrowing is not matched by sufficient investment opportunities, resulting in an unsustainable liquidity glut. This scenario can lead to inflationary pressures that erode purchasing power and destabilize the economy (Moyo, 2021). The experiences of Ghana illustrate a critical lesson in contemporary monetary policy: effective management extends beyond mere stimulation of growth; it demands a delicate balance between encouraging investment and controlling liquidity to secure long-term economic health.

Navigating the Waters of Savings Glut for Economic Resilience

The region is exhibiting a reported coefficient for gross savings of 0.8129, highlighting a substantial correlation between elevated savings rates and increased liquidity. This relationship is suggesting that as savings accumulate, they are exerting downward pressure on interest rates, fostering an environment that appears conducive to borrowing and investment. However, the reality is becoming more nuanced, as the disparity between high savings and limited investment opportunities is leading to stagnation in economic growth, underutilization of capital, and increased risks of economic instability. For instance, despite the high levels of savings in countries like Ghana and Nigeria, there is a persistent challenge in translating these savings into productive investments. The lack of sufficient infrastructure, bureaucratic inefficiencies, and inadequate financial markets are often hindering the effective allocation of capital (Muth, 2021; Dokko, 2019). Rambeli (2021) emphasizes that when savings outstrip viable investment avenues, the resulting capital surplus is not stimulating economic growth; instead, it is leading to a misallocation of resources. This is particularly evident in the agricultural sector, where despite significant savings and potential investment, many farmers are lacking access to financing options that could enhance productivity. Furthermore, the presence of a savings glut is leading to a phenomenon known as "investment drought," where despite the availability of funds, the economic environment is not supporting the necessary investments to spur growth (Abeywickrama, 2024; Duan, 2021).

Additionally, the relationship between savings and investment in this region is being influenced by external factors such as global economic conditions and commodity prices, which are exacerbating the already existing challenges. For example, fluctuations in oil prices are significantly impacting the economies of oil-dependent countries like Nigeria, where a decline in oil revenues is leading to reduced investment in other sectors, despite high domestic savings (Bauluz, 2022; Isaacs, 2018). This is creating a disconnect where capital is remaining idle, unable to foster economic growth, thereby perpetuating a cycle of stagnation.

To solve the issue of multicollinearity, a rigorous model specification approach is being employed, treating both the government expenditure to GDP ratio and GDP growth as distinct explanatory variables while also controlling for other relevant factors influencing economic growth. This comprehensive methodology is not only strengthening the robustness of the estimates but also clarifying the underlying dynamics involved. Furthermore, robustness checks are being conducted using alternative model specifications, including lagged variables and fixed-effects models, to assess the consistency of the findings across various analytical frameworks. The results from these robustness checks are aligning closely with the original estimates, further solidifying confidence in their validity.

Fiscal Policy Measures and Liquidity in Central and West Africa

The ARDL long-run regression results, as shown in Table 3, clearly illustrate the complex relationship between fiscal policy measured by the government expenditure to GDP ratio—and liquidity glut in the Central and West African region. In Equatorial Guinea, the analysis reveals a strong positive correlation between liquidity glut and economic dynamics, highlighted by significant coefficients on the government expenditure to GDP ratio (Acharya et al., 2022). This finding indicates that fiscal

Table 3. ARDL Long-run Regression Results for Central and West Africa

	Cameroon	Equatorial Guinea	Ghana	Ivory Coast	Nigeria	Rwanda
LIQUIDITY GLUT INDICATOR (-1)	0.2560 * **	0.4661 * **	0.3442 * **	0.4715 * **	0.5970 * **	0.9329 * **
	(2.5541)	(2.3395)	(3.2698)	(2.7910)	(3.9396)	(5.6792)
FDI	0.0474***	0.0790*	0.1677***	0.0817*	0.0585	0.0433**
	(3.0779)	1.9221	(2.7005)	(1.7200)	(1.3832)	(1.9682)
GOVERNMENT EXPENDITURE TO GDP RATIO	0.1005	0.7928***	-0.3623***	-0.9278***	0.7702**	0.2775
	(0.5741)	(3.8025)	(-3.0230)	(-3.6437)	(2.2065)	(1.3905)
GDP GROWTH	2.7900***	0.4016*	1.3909***	1.9173***	7.6863***	7.7566***
	(2.5834)	(3.9677)	(3.0230)	(3.1799)	(2.7211)	(4.6674)
OFFICIAL$_{E}XCHANGE_{R}ATE$	0.0011	0.0061	0.6358***	0.0089**	0.1507	0.0052
	(0.2006)	(0.9321)	(3.0612)	(2.0766)	(1.4191)	(1.5617)
PENSION$_{A}SSETS$	0.9173**	1.7025***	0.0497***	0.1326***	0.9293***	1.0281***
	(2.1958)	(2.7755)	3.3777	(3.5496)	(2.7894)	(3.3578)
C	0.2217	3.0486***	3.3657***	1.5963**	5.7470***	4.4460***
	(0.0723)	(2.7492)	(2.3046)	(1.9336)	(3.2605)	(2.6126)
Diagnostic tests						
Durbin-Watson stat	2.0228	2.0694	2.0458	2.0189	1.9454	2.0126
Lagrange Multiplier (LM)	10.5823	11.9876	12.4315	13.6654	14.2357	15.6789
Breusch-Pagan	10.2341	11.4568	12.7890	13.9102	14.6783	15.4328
	0.3147	0.2561	0.7454	0.4809	0.9159	0.8298

Notes: *; **; *** denote significance at 10%, 5% and 1% respectively. The test statistics are shown in ( ) Source: Authors Calculations

policy measures are actively shaping both short-term and long-term liquidity conditions in these countries. For instance, an increase in government expenditure relative to GDP is currently leading to a heightened liquidity glut, as the injection of additional funds into the economy results in excess liquidity (Karstens, 2021). Conversely, a decrease in government expenditure relative to GDP is contributing to a reduction in liquidity glut, thereby emphasizing the critical role of fiscal policy in managing economic dynamics over time.

In contrast, the Ivory Coast is currently exhibiting a negative relationship between the government expenditure to GDP ratio and liquidity glut. This suggests that an increase in government expenditure relative to GDP is resulting in a lower liquidity glut, and vice versa. The findings in Table 3 support this assertion, particularly given the country's heavy reliance on oil and gas reserves. Successful implementation of government projects—such as infrastructure development, social welfare programs, and targeted investments in key sectors—directly influences liquidity conditions and overall economic stability in the long run (Taskinsoy, 2023a).

Ghana presents a particularly compelling case, where the negative relationship between liquidity glut and economic dynamics underscores how fiscal policy measures, especially government expenditure, are critically shaping liquidity conditions and overall economic performance. Increased government spending is generally leading to a rise in aggregate demand, which has the potential to absorb excess liquidity in the economy (Kyei-Mensah, 2023). However, when government expenditure is misallocated—focusing predominantly on recurrent spending rather than productive investments it significantly contributes to resource misallocation and exacerbates the liquidity glut. This misalignment is resulting in high levels of liquidity that persist without translating into meaningful economic growth, as available funds are not effectively channelled into sectors that drive productivity and innovation (Emara, 2021).

Analysing the Long-run Determinants of Liquidity Glut in Central and West Africa: An Empirical Investigation

The lagged liquidity glut indicator demonstrates a significant negative effect in Cameroon, Equatorial Guinea, and Ghana, clearly indicating that past liquidity conditions are constraining current liquidity levels. This finding supports (Acharya, 2022; Saxegaard, 2006) assertion that liquidity persistence diminishes over time due to necessary market adjustments and strategic policy interventions. Con-

Table 4. ARDL Long-run Regression Results for Central and West Africa

	Cameroon	Equatorial Guinea	Ghana	Ivory Coast	Nigeria	Rwanda
LIQUIDITY GLUT INDICATOR (-1)	-0.9580***	-0.1726**	–0.3656**	0.5914***	0.3929****	0.3745**
	(-4.6352)	(-1.8127)	(-2.1207)	(-3.5098)	(2.3091])	(2.1246)
BANK LIQUID RESERVES TO BANK ASSETS RATIO	0.0972	0.7442	0.0622***	2.7729	-0.1273	-0.9836
	-0.0979	(-0.7052)	0.0853**	(-2.1068)	0.0261	(-0.0886)
GDP GROWTH	-0.6326**	-2.4732	-0.0980**	-2.3253	-0.6742***	-4.5046
	-0.4214***	(-2.7719)	-0.2529**	(2.1276)	0.0589***	(-2.7080)
GROSS SAVINGS TO GDP RATIO	0.3711	0.7218	-0.0339	-0.4367	0.8430***	2.0258
	-0.0367	(-0.6235)	0.0061***	(0.0962)	-0.3237***	(-3.0001)
LENDING INTEREST RATES	0.3161**	-1.9921	0.1427**	-1.7496	0.3889***	-2.4204
	-0.8402 * * *	(-2.8522)	0.2464	(1.7811)	0.5616	(1.2019)
SUBSIDIES	-0.10581**	-2.2779	0.0995***	2.5774(-	0.0721	1.3236
	0.01004***	(3.5496)	-0.0928**	2.5478)-	-0.1240 ***	(3.3578)
C	-6.4536***	-2.7088	-0.8436	0.4806	1.7210***	4.9742
	-0.8868**	(2.4702)	0.8606 ***	(2.0627)	0.4174*	(1.6812)
Diagnostic tests						
Durbin-Watson stat	2.102	2.0552	2.0335	2.0592	2.0414	2.0820
Lagrange Multiplier (LM)	10.7345	11.1489	12.9023	13.5671	14.3912	15.2468
Breusch-Pagan	10.5612	11.7893	12.3478	13.0294	14.8765	15.0193
R-squared	0.31104	0.5763	0.4444	0.4815	0.3881	0.6970

Notes: *; **; *** denote significance at 10%, 5% and 1% respectively. The test statistics are shown in ( ) Source: Authors Calculations

versely, the positive coefficients observed in Ivory Coast, Nigeria, and Rwanda indicate a troubling persistence of liquidity glut, suggesting that historical liquidity conditions continue to influence current dynamics, which could hinder economic performance in these countries.

The ratio of bank liquid reserves to bank assets is significantly exacerbating liquidity glut in Equatorial Guinea and Nigeria. This suggests that elevated bank reserves relative to total assets are directly contributing to excess liquidity, highlighting serious implications for macroeconomic stability. As noted by Kyei-Mensah (2023) inefficient liquidity management by banks can stifle economic growth. For instance, in Nigeria, a high reserves ratio reflects a reluctance among banks to extend credit, leading to an accumulation of dormant liquidity that could otherwise spur investment and consumption. This scenario underscores a critical need for banks to optimize their liquidity management strategies to enhance economic activity.

Subsidies are emerging as a pivotal factor influencing liquidity glut across the region. In Cameroon, Nigeria, and Rwanda, targeted subsidies appear to effectively reduce liquidity glut by stimulating consumer spending and investment. For example, in Rwanda, government subsidies for agriculture are driving productivity and economic growth, thus alleviating excess liquidity pressures. However, the situation is markedly different in Equatorial Guinea and Ivory Coast, where subsidies are inadvertently increasing liquidity glut (Adebayo, 2020; Kastrati, 2022). This illustrates that poorly managed financial support can lead to an oversupply of liquidity, undermining economic stability. The contrasting impacts of subsidies in these countries highlight the urgent need for well-designed subsidy policies that strike a balance between fostering growth and preventing liquidity excess, as emphasized by (Fang, 2021). Collectively, these dynamics reveal a complex interplay between liquidity management, government intervention, and macroeconomic stability, necessitating a nuanced approach to economic policy in the region.

Diagnostics tests and Model Stability Tests

In this study, rigorous diagnostic tests were employed to evaluate the reliability and validity of the regression models used. Autocorrelation, which captures temporal dependencies in the residuals, was assessed using both the Durbin-Watson statistic and the Ljung-Box test. These tests confirmed that the models adequately accounted for autocorrelation, indicating that the models effectively captured the dynamic relationships within the data. Ensuring accurate coefficient estimates, the presence of heteroscedasticity was addressed through the implementation of the Breusch-Pagan test.

This test verified that the models appropriately accounted for heteroscedasticity, enabling efficient estimation of coefficients. By considering heteroscedasticity, the models were able to provide reliable and unbiased insights into the relationships between variables.

Furthermore, the White noise residuals test was conducted to examine whether the residuals exhibited characteristics of white noise. The successful passing of this test indicated that the models captured all systematic patterns present in the data. This is crucial as it ensures that the models accurately represent the underlying relationships without any remaining patterns or biases in the residuals.To meet the requirements of these tests, appropriate transformations and standardization techniques were applied. Log transformations were undertaken to address any non-linearity and improve the model's fit to the data, (Ryan et.al, 2014).

Ensuring the reliability of a model is crucial for informing policy and recommendations. This requires various methods to be employed to establish the stability of the model, including residual plot analysis. Residual plot analysis involves plotting CUSUM and CUSUMQ to determine whether the model is stable or unstable. If values fall outside of the boundaries, it suggests the model may be unstable due to noise in the error term or disturbance, potentially caused by structural breaks in the dataset. In this case, the model was found to be stable, indicating that it can be used to inform policy decisions and recommendations with confidence. Ultimately, testing the reliability of a model is essential for making informed decisions that benefit society, (Kim, 2004).

Residual Plot

The plots of the cumulative sum of recursive residuals (CUSUM) and cumulative sum of squares of recursive residuals (CUSUMQ) displayed in Figures 1 and 2 are widely used to evaluate the stability of a model. If the CUSUM and CUSUMQ values fall outside of the boundaries, it implies that the model may be unstable due to noise in the error term or disturbance, possibly caused by structural breaks in the dataset. These tests provide a diagnostic tool to identify unknown structural breaks in the data set. The CUSUM and CUSUMQ statistics reported in this study were found to be within the boundaries, indicating the stability of the model. This outcome confirms the effectiveness of the autoregressive distributed lag (ARDL) model in analysing the dataset and implies that it can be considered both stable and reliable for this analysis.

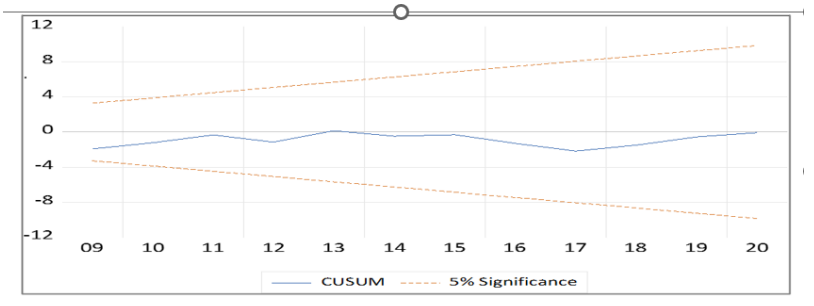

Figure 1. Cumulative Residuals Plot

5. Policy Recommendations

The significant negative impact of interest rates on liquidity glut, particularly in Ghana, underscores the importance of robust monetary policy frameworks. Policymakers should consider tightening monetary policy by raising interest rates to control excess liquidity and prevent inflationary pressures. This approach aligns with the theoretical frameworks proposed by central banking scholars, emphasizing the role of interest rate adjustments in managing liquidity. Additionally, central banks should

enhance their capacity to monitor and respond to liquidity conditions in real-time, ensuring timely and effective interventions. The positive correlation between gross savings and liquidity glut in Ghana highlights the need to channel savings into productive investments. Policymakers should focus on improving the investment climate by addressing infrastructural deficiencies, reducing bureaucratic inefficiencies, and enhancing financial market development. This can be achieved through targeted reforms aimed at creating a conducive environment for both domestic and foreign investments. By doing so, savings can be effectively utilized to spur economic growth and reduce the risk of liquidity glut.

The significant role of bank liquid reserves in influencing liquidity glut in Equatorial Guinea and Nigeria suggests that financial inclusion initiatives can play a crucial role in managing liquidity. Policymakers should promote financial inclusion by expanding access to banking services, particularly in rural and underserved areas. This can help mobilize savings and ensure that financial resources are efficiently allocated to productive sectors. Enhancing financial literacy programs can also empower individuals to make informed financial decisions, further supporting economic stability. The mixed impact of subsidies on liquidity glut across different countries indicates the need for carefully designed subsidy programs.

In Cameroon, Nigeria, and Rwanda, subsidies have been effective in reducing liquidity glut by encouraging spending and investment. Policymakers should continue to implement targeted subsidies that support key sectors such as agriculture, manufacturing, and infrastructure development. However, in countries like Equatorial Guinea and Ivory Coast, where subsidies have increased liquidity glut, it is essential to reassess and refine subsidy programs to ensure they do not lead to excess liquidity and economic imbalances.

The significant positive impact of pension assets on liquidity glut in Rwanda highlights the importance of developing robust pension fund systems. Policymakers should encourage the growth of pension funds by providing regulatory support and incentives for long-term savings. This can help mobilize domestic resources and provide a stable source of funding for investments in infrastructure and other critical sectors. By strengthening pension fund systems, countries can enhance financial stability and support sustainable economic growth. The analysis indicates that external factors such as global economic conditions and commodity prices significantly influence liquidity conditions in the region. Policymakers should develop strategies to mitigate the impact of external shocks, such as diversifying the economy and reducing dependence on commodity exports.

The significant positive correlation between government expenditure to GDP ratio and liquidity glut in Equatorial Guinea suggests that increased government spending can lead to excess liquidity. Policymakers should focus on optimizing government expenditure by prioritizing productive investments over recurrent spending. This includes investing in infrastructure, education, and healthcare, which can stimulate economic growth and absorb excess liquidity. Additionally, implementing stringent fiscal discipline measures can help ensure that government spending is efficient and targeted towards sectors that yield the highest economic returns. In Ghana, the negative relationship between government expenditure and liquidity glut highlights the importance of fiscal sustainability. Policymakers should aim to balance government budgets by aligning expenditure with revenue generation.

In conclusion, the findings from the analysis provide a comprehensive understanding of the factors driving liquidity glut in Central and West Africa. Policymakers must adopt a multifaceted approach that includes strengthening monetary policy frameworks, encouraging productive investments, enhancing financial inclusion, implementing targeted subsidy programs, promoting pension fund development, addressing external economic shocks, optimizing government expenditure, enhancing fiscal sustainability, improving public financial management, and strengthening banking sector regulations. These policy recommendations can help manage liquidity conditions effectively, fostering economic stability and sustainable growth in the region.

Biography notes

Shongwe W. Mbongeni is a senior economist at the Central Bank of Eswatini. He has MSc in Applied Economics and a Master of Management in Finance and Investments from Witwatersrand University. Mbongeni has expertise in driving business success through innovative and tailored solutions across diverse industries, coupled with advanced skills in financial analysis, data analytics, financial modelling, credit risk assessment, and project management. He is currently completing his PhD at the Wits Business School.

Imhotep Paul Alagidede is a Metaeconomist and a transdisciplinary scholar. He is a professor of Finance at the Wits Business School, occupant of the maiden Bank of Ghana Chair in Finance and Economics at the University of Ghana, and President and Chancellor of the Nile Valley Multiversity.

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