Monetary Approach to Balance of Payments: Empirical Evidence from ECOWAS Countries

Cham, Yaya

West African Monetary Institute/Central Bank of The Gambia

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Yaya Cham
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Monetary Approach to Balance of Payments: Empirical Evidence from ECOWAS Countries

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DECLERATION

I, YAYA CHAM, hereby declare that this Thesis is original research I have undertaken under the guidance of my supervisor Edward Lambert (99AIU41765) and apart from references to other people's research findings which have been duly cited and this dissertation has neither in part nor in full been presented for another degree elsewhere.

…….. August 21, 2023

YAYA CHAM

(ID: UD80452BEC89669)

CERTIFICATION

DEDICATION

I dedicate this thesis to Allah, the Almighty God for His wisdom, grace, impeccable support, and mercies during the course of my Doctorate program.

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List of Tables

LIST OF FIGURES

Abstract

The study primarily presents a critical and imperative analytical framework, accentuating the intricate interplay between the demand for money and the supply of money in shaping the economic equilibrium of the balance of payments (BOP). The focal point of this paper involves a meticulous examination of the monetary perspective regarding the BOP within the ECOWAS countries spanning the temporal domain from 2005 to 2019. This investigation is accomplished through the adept utilization of the second-generation unit root tests, namely the Common Augmented Dickey-Fuller (CADF) test and the Cross-sectional Augmented IPS (CIPS) test, alongside the comprehensive Westerlund cointegration test to ascertain the enduring nexus existing within the examined series. By adopting the dynamic homogeneous panel estimator, this study conducts an exhaustive scrutiny of both the short-term and long-term dynamics. The empirical findings, gleaned from the Pooled Mean Group analysis, unveil the pivotal role of monetary variables in determining BOP. In the medium and extended temporal spectra, ameliorations in domestic credit within the ECOWAS region are juxtaposed with a concomitant decline in net foreign assets, thus manifestly contributing to the deterioration of the BOP milieu in the aforementioned zones. Furthermore, a parallel analysis divulges a counteractive relationship between economic growth and inflation with net foreign assets in the short run, while this association transforms a synergistic correlation over the long haul. Conversely, the money supply engenders a positive and consequential influence on net foreign assets, evinced across both the transient and enduring periods. Essentially, the research findings substantiate the veracity of the monetary approach within the purview of the zones under contemplation. Consequently, monetary variables wield substantial and pronounced impacts on the BOP, with an escalating BOP, forth as a harbinger of enhanced equilibrium within the zones' balance of payments framework. Concerning policy implications, the underlying study underscores the monetary approach as an adept and fitting strategy, elucidating the notion that an outsized BOP deficit could potentially foster an environment conducive to the propagation of excessive domestic credit. Knowledge obtained from this research will go a long way in helping policy formulation and will also help the region in ensuring smooth developments in the external sector especially during the implementation of monetary policy.

Contents

Chapter 01: Introduction

The balance of payments (BOP) is a fundamental concept within international economics that encapsulating a state's economic interactions with the entire globe. It serves as a comprehensive record of a nation's monetary transactions and financial flows with other states over a particular period, especially a year or a quarter (Soukiazis & Cerqueira, 2012). The BOP is a pivotal component of a country's overall economic health, reflecting its trade in goods, services, and capital, and its financial transfers and other cross-border activities (Frenkel & Johnson, 2013). Scholarly literature on the balance of payments spans several decades and has undergone considerable evolution in its theoretical underpinnings and empirical analyses. This review encapsulates key developments and themes within this vast body of literature.

1.1: Historical Evolution of Balance of Payments

Previous studies on BOP has its origins in the works of early economists like David Hume, who discussed the gold specie flow mechanism, and John Stuart Mill, who examined the principles governing international trade (Thirlwall, 2012). Frenkel and Johnson (2013), opined that the modern framework for BOP analysis, however, was largely shaped by the seminal work of economists such as Jacob Viner, Ragnar Nurkse, and Harry Johnson in the mid-20th century. Their contributions emphasized the role of different balance of payments components in shaping a nation's economic performance (Soukiazis & Cerqueira, 2012).

According to Thirlwall (2012) the BOP is typically divided into three major components: the current account, the financial account and the capital account. The current account comprises trade in goods, services, and the underlying income (such as interest and dividends), while the capital account includes non-financial transfers and certain capital transactions. The financial account encompasses cross-border investment, sparking from direct investment, other financial derivatives and portfolio investment.

With a particular interest in developing countries, the BOP has proved to be an instrumental indicator of economic activities including regional economic blocks such as the Economic Community of West African States (ECOWAS) countries. ECOWAS is a regional intergovernmental organization established in 1975, comprising 15 member states in West Africa. Its primary objective is to promote economic integration, political stability, and social progress among its member countries.

ECOWAS facilitates cooperation and collaboration in various sectors, including trade, agriculture, energy, and infrastructure development, with the aim of fostering a more integrated and interconnected West African region. The organization also plays a crucial role in conflict resolution, peacekeeping efforts, and the promotion of democratic governance within its member states, working towards the collective advancement and well-being of the people in the West African region. The challenges associated with BOP in ECOWAS have been a matter of concern for policymakers as imbalances in the BOP have constraint these countries in achieving a viable external position and in meeting convergence criteria essential in introducing a unified currency for the whole region (Magazzino, 2016).

According to Pratima Chhetri (2020), significant relevance amongst the macroeconomic objectives of a country is confined to the achievement and maintaining an equilibrium in the BOP. Unfortunately, disequilibrium in the BOP has emerged as one of the most worrisome issues across the globe particularly in the ECOWAS region and scholars have explored methodological approaches useful in addressing BOP disequilibrium. Amongst the practical approaches is the monetary approach to the balance of payments (MABP) (Frenkel & Johnson, 2013). Past research endeavours have extensively investigated the MABP within both advanced as well as emerging economies, yielding valuable insights (Soukiazis & Cerqueira, 2012).

Nevertheless, the exploration of this approach within the context of the ECOWAS region remains comparatively limited. Recognizing this scholarly void, the present study seeks to rectify this gap by scrutinizing the applicability of the MABP Payments across a panel encompassing 15 nations within ECOWAS. This panel comprises both West African Monetary Zone (WAMZ) and West African Economic and Monetary Union (WAEMU) countries, spanning the temporal domain from 2005 through 2019.

In a distinctive departure from antecedent research, this study extends its methodological purview to encompass the intricate issue of cross-sectional dependence at each analytical stage. Doing so, not only augments the existing body of knowledge but also enhances the robustness of the investigation's findings.

This paper serves as an original contribution to the academic discourse by leveraging contemporary data and focusing predominantly on the BOP Monetary Approach across the entire ECOWAS member states. This emphasis diverges from previous studies that have

primarily centred on singular entities, namely individual countries or exclusively the WAMZ or WAEMU blocs. This comprehensive approach fosters a more profound comprehension of the complexities inherent within the subject matter, thereby facilitating informed policy decisions concerning external viability and sustainable trajectories through the prism of monetary policy.

Furthermore, this study extends its analytical horizon to encompass a more protracted temporal span. This temporal extension provides a panoramic vantage point for policy formulation, simultaneously affording an avenue for examining the enduring validity of monetary policy vis-à-vis the BOP.

Essentially, the preceding literature has engendered a wealth of insights, predominantly within developed and emerging economies, but a noticeable research lacuna exists concerning the MABP within the ECOWAS region. Addressing this scholarly gap, the present study adopts a methodologically enriched perspective, examines a broader regional context, and extends its temporal scope. Through these distinctive attributes, the research contributes holistically to our understanding of ECOWAS countries' dynamics and enables enlightened policy deliberations concerning external equilibrium and the tenets of enduring monetary strategies.

Essentially, the development of BOP is crucial in analysing external sectoral viability and sustainability as it has a mainstream effect at both country and regional levels through monetary policy reaction functions. This motivation warrants the necessity of examining if the BOP is primarily influenced by ECOWAS regional block monetary variables, especially in the WAMZ. This is possible by probing into WAMZ concerning persistent BOP problems and as a result, could not meet the stipulated macroeconomic conditions set for the launching of the single currency, the ECO. Consequently, an examination of the geometrical as well as the theoretical basis in the determination of the necessity of the monetary approach to BOP in ECOWAS countries is of significant relevance.

1.2: Statement of the problem

A comprehensive understanding of the BOP in the ECOWAS region may shed light on the intricate economic interactions and financial flows between its member countries and the entire globe. The BOP serves as a vital indicator of a nation's economic health, reflecting its trade dynamics, capital movements, and financial relationships with other nation (Magazzino, 2016). Despite extensive research on the BOP in various global contexts, the specific exploration of

this phenomenon within the ECOWAS region has been relatively limited. The underlying aim of the study was bridging the gap by conducting a thorough analysis of the BOP in a panel comprising 15 ECOWAS countries, including both the WAMZ and the WAEMU nations. The investigation spans the period from 2005 to 2019.

One notable departure of this study from its predecessors lies in its methodological approach. It takes into consideration the issue of cross-sectional dependence, a crucial consideration that enhances the robustness and reliability of the findings. By methodically addressing this concern at every step of the analysis, the study contributes to the methodological advancement of BOP research (Frenkel & Johnson, 2013). Moreover, this research's uniqueness lies in its focus on the broader ECOWAS region as a whole. Unlike previous studies that often concentrated on individual countries or specific sub-regional blocs, this study encompasses a comprehensive perspective. This approach provides a holistic understanding of the BOP dynamics across the entire ECOWAS region and fosters well-informed policy decisions.

Additionally, the temporal scope of the study extends beyond the immediate present, allowing for a comprehensive evaluation of BOP dynamics over a more extended period. This extended horizon not only provides a panoramic view for policy formulation but also enables an assessment of the enduring validity of monetary policies concerning the BOP. Typically, while previous research has contributed significantly to our understanding of BOP dynamics globally, there remains a need for a focused analysis within the ECOWAS region. This study addresses this gap by utilizing an enriched methodology, encompassing a broader regional context, and extending the temporal horizon. Through its comprehensive approach, this research enhances our insights into the complexities of BOP dynamics in ECOWAS countries, facilitating informed policy deliberations regarding external economic equilibrium and the efficacy of enduring monetary strategies.

1.3: Research Aim and Objectives

The multifaceted objective of the investigation was confined towards the exploration of the validity of the monetary approach towards the BOP in ECOWAS countries.

The following were the specific research objectives:

- To examine the impact of excess monetary supply on BOP equilibrium in ECOWAS countries.

- To assess the relationship between international reserves and domestic credit.

1.4: Research Questions

Is there any effect of monetary supply on BOP equilibrium?

What is the relationship between international reserves and domestic credits?

1.5: Significance of the study

The study is perceived to prove essential as it provides fundamental implications on ECOWAS member economies BOP since it presents profound knowledge in analysing BOP disequilibrium, and monetary policy. Consequently, it informs policymakers on whether domestic credit expansion ensures BOP stability over time. It is also expected that the study will enable the policymakers to implement profound macroeconomic policies ideal for the maintenance of viable external positions and stable BOP in ECOWAS. In the long-range, this might eliminate the entire chronic deficits inherent in the BOP in ECOWAS member states.

1.6: Organisation of the study

The study begins with an opening chapter that provides the context and historical context of the research. It outlines the statement of the problem, research objectives, questions, alongside underscoring the study's importance. Subsequently, the succeeding chapter conducts a comprehensive review of the existing literature, delving into established patterns, the theoretical underpinning, and prior empirical investigations. Chapter three explicates the selected methodology, followed by the presentation and analysis of the collected data in the subsequent section. The fifth chapter culminates as the conclusion, while the sixth chapter offers recommendations drawn from the study's findings.

Chapter 02: Literature Review

2.1: The Concept of Balance of Payment and Development of ECOWAS

An equilibrium in the BOP is among the macroeconomic objectives of the region's economic policy and a good understanding of the monetary approach to the BOP helps in appreciating the relationship between monetary policy and BOP adjustments and also deepens the policymakers in the understanding of external sectoral issues like external viability and sustainability concerning their impact on the domestic economy (Thirlwall, 2012). However, there is very little known regarding the determination of BOP regarding the monetary variables in regional blocks such as ECOWAS.

As such, there is a need for a study to be undertaken while taking into account ECOWAS blocks having experienced persistent imbalances in the BOP and to date remain struggling in meeting underlying convergence criteria for the single currency. According to Fontana and Kamara (2023) despite WAEMU having launched a single currency for its member states, ECOWAS is still faced with challenges in directing policies towards the formation of a unifying currency for the fifteen countries including Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Liberia, Mali, Niger, Nigeria, Ghana, Guinea Bissau, Senegal, Sierra Leone, The Gambia and Togo by through the merging of WAMZ and WAEMU (Fontana & Kamara, 2023; Agbonkhese & Adekola, 2014).

The formation of ECOWAS was vested in improving the living standard of the people through the creation of an economic union, ensuring maintenance of economic stability, promotion of cooperation and integration, trade liberalisation, and common tariffs amongst others (Adamu, 2013). Nevertheless, with the introduction of the Euro in 1999, ECOWAS has undertaken significant strides into the development of a unified single currency for the fifteen countries via the WAMZ and WAEMU representing Anglophone and Francophone countries respectively (Adamu & Audu, 2018). The latter was able to launch a single currency, the CFA whilst the former is still struggling with the development of a unified currency, the Eco for the WAMZ (Fontana & Kamara, 2023).

A crucial achievement amongst the mandate of ECOWAS is vested in the facilitation of trade, integration of the financial sector and statistical harmonisation. However, the underlying challenge of the Economic Block is confined to the development of a single currency for the member states due to the underlying imbalances associated with the BOP as a result of wide fiscal deficits, misappropriation of external funds, irrational domestic credit expansion, low

export receipts, minuscule foreign direct investment flows, debt monetisation, and price distortion at large (Adam & Itsede, 2010).

Essentially, ECOWAS has failed in coming up with a common currency for the member countries due to a myriad of reasons sparked by political and economic issues especially the inability of the WAMZ in attaining entire criteria for convergence (Mogaji, 2018). Over the years, the region has remained significantly affected by different macroeconomic shocks and disequilibrium in the BOP thus hindering the development of a single currency as countries struggle with the promotion of economic growth, price stability and employment. The multifaceted factor that sparks from chronic BOP triggers trade inefficiency as well as slugging economic growth in the ECOWAS region (Adam & Itsede, 2010).

According to Adamu and Audu (2018), the underlying arguments have gained momentum after becoming clear that WAMZ and UEMOA also notably regarded as WAEMU Countries have failed for some reasons in meeting as well as sustaining the convergence criteria disrespect various attempts in the implementation of the rules in various economies (Tijani, 2014). Tentatively, the reasoning is based on the satisfaction of the convergence criterion showcasing synchronisation of a shock considering various similar monetary policies. This showcases a pre-indication in launching of a common currency in the elapsed two decades.

Over the years, there was no given time that the eight WAEMU or the six WAMZ countries were in a position of satisfying the ultimate fiscal deficit criterion. As a group of fifteen ECOWAS countries, the best years of performance since the elapsed one and a half years was in 2007 whereby seven of the countries were in a position of satisfying the criterion (Senyefia, Oduro-Okyire & Eunice, 2019). Over the years, it has been established that WAMZ has been suffering from an inability to launch the proposed single currency despite so many unmet-proposed- launching dates inevitably owing to several factors including weak external sectoral developments in giving rise to the BOP disequilibrium. The imbalance is known for justifying most of the problems these countries are facing over the past decades (Gnahe & Huang, 2020).

It has resulted in stunted economic growth and adversely affecting prices and financial stability with the compounding undesirable effects on regional trade developments. Because BOP equilibrium is a vital ingredient for economic policy in the region, essentially monetary approach comes into play to bring about comprehensive knowledge as a linkage between BOP

adjustment and monetary policy. This is paramount because external sectoral developments especially the BOP has a significant meaning for member states within in the region.

A study by Mushendami et al. (2017) established that the inability of the ECOWAS countries experiencing a relatively favourable or outstanding BOP position, the structural adjustment programmes adopted by most of these countries which are developing nations underpins their conventional analytical framework largely from the IMF financial programming model. Despite the adjustment programmes being highly sophisticated and complex in the realms of policy measures aimed at aversion objectives inclusive of the acquisition of viable BOP, long terms satisfactory growth performance and low inflation rates. The IMF financial programming model's immediate objective is confined towards the acquisition of a viable BOP position (Oluwole & Oloyede, 2020). As pointed out by Tijani (2014), the model is typically monetary, and it is created on the balance of payment frameworks.

The IMF's theoretical approach toward adjustments and economic stabilisation is the monetary approach to BOP which considers the imbalances externally to emerge from monetary disequilibrium (Tule et al., 2019). This has accounted for the monetary approach's extensive use in the analysis and designing of the BOP troubled countries' economic policies (Osisanwo, Tella & Adesoye, 2019).

Presently, this might not be disputed based on programmes and economic reforms in the monetary approach proponents. This is because it suggests the effectiveness of typical reform policies and measures that might be developed to address the challenges associated with BOP in the economy. Nevertheless, this is highly dependent on their monetary implication being considered and the ability of the monetary authorities to create credit as well as control the supply of money (Magazzino, 2016).

2.2: The Developments Facts on Balance of Payment (BOP) in the ECOWAS Countries

It can be observed that the overall balance of WAMZ countries has been in deficit consistently except in a few periods. The financial account of WAMZ recorded significant fluctuation in the reviewed years and it showcases the ideal net disposable of liabilities and financial assets. Some countries have recorded surplus balances of current, capital and financial accounts throughout the review period. The deterioration has been explained by internal factors which influence the adverse effects of countries' BOP ranging from excessive demand for foreign products, political instability and infrastructural rigidities in the domestic production process.

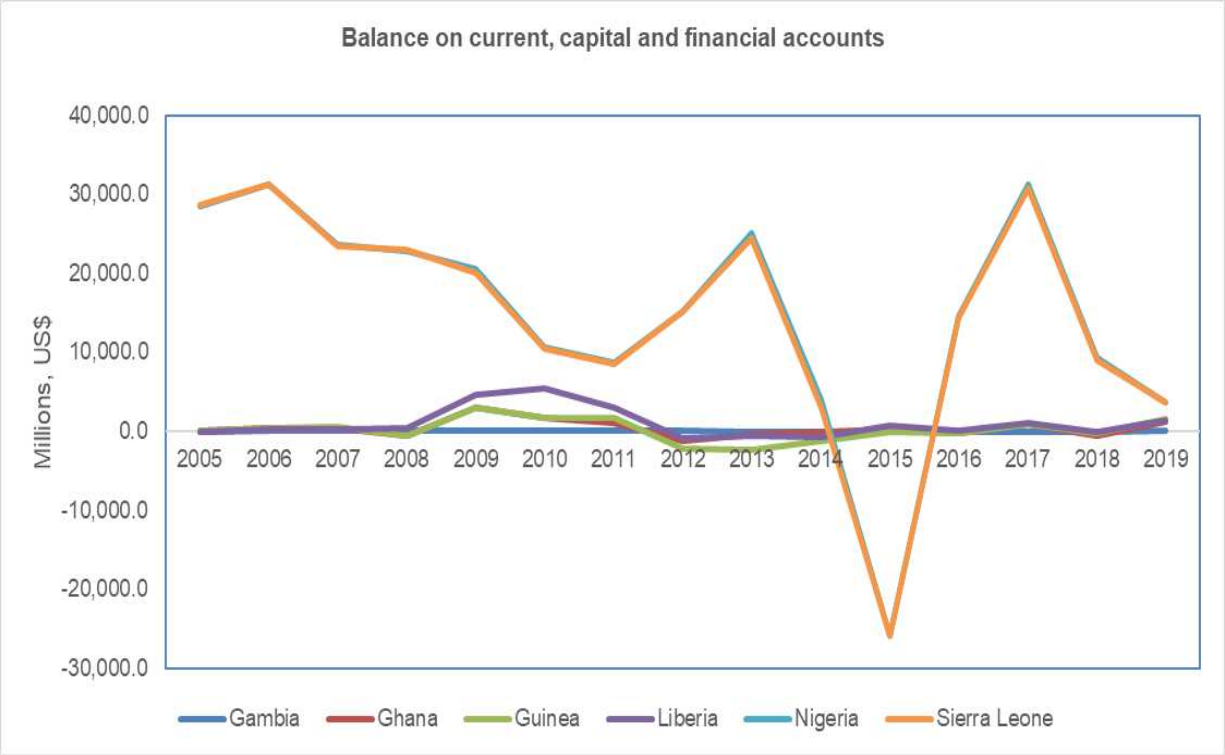

Figure 1: The balance on Current, Capital and Financial Accounts

Whilst most economies registered improvements in their capital and financial accounts, others experienced a mixed basket of deficits and surpluses explained by widening current and financial accounts. The capital and financial accounts of the zone have been fluctuating over the period. However, it has been very steady in some countries. Being a net importing region, most of the countries recorded substantial balances in the current account.

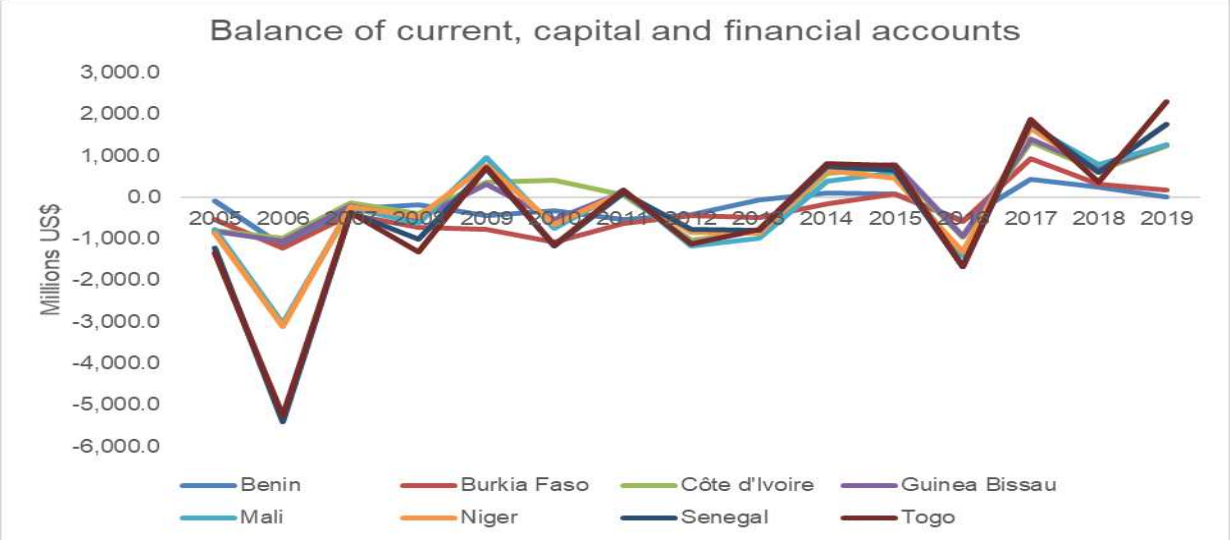

Figure 2: Balance of Current, Capital and Financial accounts

The graph above showcases that the francophone West African countries exhibited similar directions. The economies experience worsening situations in unison and registered improvements simultaneously. The developments in their overall balances are explained by the deteriorating current and financial accounts during the periods under consideration.

2.3: Theoretical Framework

The section raises a comprehensive discussion on the BOP theoretical framework with respect to definitions of terms and concepts, the investigation of the subject matter of BOP, a statement on issues of theoretical importance, a research question, and a description BOP account. The BOP is a summary of a nation's international transactions with the entire globe during a given period and accounts for the value of goods and services, financial and capital flows, and subsequent flows (Carbaugh, 2008).

The BOP entails three main accounts, namely: the current, official settlement and capital accounts. The current account treats transactions on goods and services and unrequited transfers. The capital account deals with exchanges and money capital financial assets. The official account records transactions on financial assets and official flows. Does monetary policy have an impact on the BOP especially if the accounts are imbalanced? Disequilibrium in the BOP is theoretically corrected by different approaches to ensure a balance in the external positions of the economies in the quest. The standard approaches towards addressing the BOP and/or resolving BOP disequilibrium include the absorption, elasticities, and monetary approaches (Du Plessis et al., 1998).

2.3.1: The Absorption Approach

The absorption approach discusses the relevance of income changes showcasing how devaluation influences the association between expenditure and income with particular emphasis on the BOP current account. Consequently, this method underscores currency devaluation which might result in inflation in the economy. Tentatively, this situation could be forestalled through the income redistribution effect in the reduction of the demand for goods and services or if the actual value of money balances is curtailed (Fleermuys, 2005; Bosson-A. Senyefia, et al, 2019). The similarity of the absorption and elasticities approaches assuming that BOP equilibria are permanent.

2.3.2 The Elasticity Approach

The creation of money is the only monetary policy effect on the BOP. Furthermore, the approaches of elasticities which put significant emphasis on the exchange rates effect on net exports and the income account are not taken into consideration in the adjustment process (Robinson, 1947). The approach hardly takes into consideration the capital account but rather the current account balance concerning exports and imports balances causing either a surplus or a deficit in the BOP. While considering this approach, price elasticity is infinity, and it treats the total elasticities absolute terms of the imports and exports and not enhanced comparative to unity (Fleermuys, 2005).

2.3.3: The Monetary Approach

Chacholiades (1990) stated that the monetary approach revolves around the consideration of both the BOP and the monetary supply within a given economy. Its fundamental focus lies in evaluating the equilibrium of the BOP through the utilization of serves internationally. Within the context of David Hume's price specie-flow mechanism, in realms of a fixed exchange rate regime, excessive supply of money often stimulates expenditure and generates a consequent surge in the necessity of foreign goods. The underlying demand is sustained by making use of reserves relative to foreign exchange, leading to a deterioration in the BOP accounts.

Conversely, an excess in the demand for money prompts an adjustment that facilitates an inflow of foreign exchange, aiding in its promotion. As foreign exchange inflows increase, the nation begins to accumulate a surplus balance, consequently instigating monetary expansion, which in turn rectifies the imbalance in the BOP (Dhliwaya, 1996).

The monetary approach to BOP opines that the BOP of an economy is chiefly a monetary phenomenon (Polak, 1975). Essentially, it was asserted by Johnson (1977) that imbalances in the BOP are driven by monetary affairs and ought to be resolved by monetary policy. On his part, Mundell (1969) asserted that monetary policy is comparatively more effective than fiscal policy in achieving stability in the BOP. This is based on the fact that monetary policy improves both current and capital accounts of the BOP.

It was further discussed by Blejer (1979) that BOP is primarily determined by monetary developments and imbalances in the BOP which might be ascribed to disequilibrium in the money market. The distinctive ascription of the monetary approach to BOP disequilibrium is vested on the assumption that is focuses on the monetary implications of BOP. It investigates

the link between BOP and the supply of money with an emphasis on financial assets (Melvin, 1992).

In a nutshell, the multifaceted ideology as far as the monetary approach to BOP is concerned is that it is entirely vested in" monetary phenomenon and disparities in the account can be corrected through a regime of fixed exchange rate alongside stabilised demand for money (Dhliwayo, 1996). Consequently, the imbalances in the BOP might be exclusively addressed with respect to equilibrium in the money markets without the consideration of monetary intervention by the monetary authorities.

According to Johnson (1996), it was argued that the implication is vested in the underlying disequilibrium and short-lived self-adjustment in the long run (Johnson, 1996). The weakness of the monetary approach includes the fact that it takes into consideration only monetary variables and hardly considers errors and omissions. Moreover, it also disregards central bank reserves and assumes a stable demand for money which could not be always true for entire countries as a result of the volatility in the money market.

2.4: Empirical Studies

The sector highlights the findings of the plethora of papers on the monetary policy approach to BOP. It investigates the empirical methodologies, strengths, weaknesses and conclusions of other papers on the subject. The validity of BOP as a monetary issue has been investigated by many researchers using distinct approaches including elasticity, absorption, and monetary methods. Some studies concentrated on the reserve flow equation where foreign reserve is adopted as a predictor while others use money supply, exchange rate, interest rate, inflation, and government expenditure. Selected views on the extent to which the monetary approach has been discussed and explained in detail concerning the existing literature.

In their findings, Adamu and Itsede (2010) underpinned the shortcomings in WAMZ's balance of payments accounts because of monetary issues. With the help of GMM estimation techniques for the period 1975 to 2008, they stated that domestic credit and interest rates are inversely proportional to the net foreign assets and that the GDP and BOP are positively related. In a cross-country investigation on the BOP as a monetary issue. Akpansung (2013) noted that the disparity in the BOP is primarily driven by the disequilibrium of the monetary variables. As argued by Akpansung (2013), the BOP discrepancy is correctible using domestic credit with the aid of prudent monetary policies.

However, according to Tijani (2014) in the study conducted on Nigeria's BOP, the latter is not quite a novel monetary phenomenon and disparities in the BOP could be dealt with by controlling domestic credit trade balances. By applying OLS in 1970 to 2010 data, it was found that the exchange rate tend to significantly influence the developments of BOP in Nigeria during the review period. Furthermore, Tijani also found that gross domestic product is inversely related to the BOP. The underlying findings on the monetary approach to the BOP in Ghana by Boateng and Ayentimi (2013) for the period 1980 to 2010 revealed that both domestic credit and interest rate inversely affect the NFA. On a similar prospect, the GDP growth is positively related to the net foreign economic assets.

In the study of Namibia's balance of payments-monetary phenomenon, Fleermuys (2005) found that a few macroeconomic variables showed the role of the monetary approach in causing disequilibrium in the BOP of the country. However, it was underpinned that BOP is not entirely a monetary issue. Furthermore, studies in Nigeria by Bobai (2013) also revealed with the aid of Johansen cointegration, VEM that the BOP of Nigeria is not a monetary phenomenon which is very much in line with Boateng and Ayentimi (2013) on Ghana's BOP analysis. Therefore, establishing equilibrium in the BOP is a multidimensional (other policy options) approach rather than on monetary tools alone.

By adopting the error correction method, Osisanwo, Tella and Adelowokan (2019) underpinned that monetary variable such as domestic credit, inflation, money supply and exchange rate have a long-lasting effect on the BOP in Nigeria. Their study was conducted to analyses the monetary effects of monetary policy on the country's BOP using the 1980-to-2015 time series. Their investigation suggested that stability in the BOP is attainable if authorities ensure equilibrium between demand and supply for money. A further examination of the subject using a dynamic model including ARDL and Dynamic OLS models have been applied in the study by Mukolu et al. (2017).

Mukolu et al. (2017) examined Nigeria's BOP using the ARDL cointegration technique and found that private sector credit and money supply significantly affects the BOP and the paper recommended diversification of exports in improving the position of BOP as well as ensuring consistency between the money stock and macroeconomic objectives of the economy.

Consequently, Onuchuku et al. (2018) also applied DOLS in examining the impact of monetary policy on Nigeria's BOP. It was found that monetary variables are the mainstream equilibrium

determinants of BOP in any given economy. In fact, the study recommends that broad money, exchange rate and stable interest rate should be targeted by policy measures when it comes towards controlling BOP disequilibrium.

The reviewed empirical narrations are inconclusive on whether BOP is a monetary-driven affair and the disequilibrium in the BOP is not often underpinned by monetary variables. Nevertheless, the majority of the variables conformed to the theoretical underpinnings. The above reviews showed some degree of relationship between balance of payments, GDP, inflation, interest rates and domestic credit. This review is related to a plethora of studies on the monetary approach to BOP in the ECOWAS and it evaluates the BOP applying the theoretical monetary approach in the ECOWAS taking into consideration their persistence in recording a deficit in the BOP and far from achieving the convergence criteria required in the acquisition of a unified currency for the fifteen countries.

Furthermore, the essence of the monetary approach was to incorporate the provision of a detailed analysis of the association between the monetary policies alongside the BOP. Finally, the diverse viewpoints and the scarce studies on the MABP in ECOWAS justify the necessity for probing into the validity of using the MABP in the economic block. There exists very few to limited studies on the monetary approach to BOP in ECOWAS rather on individual economies or on WAMZ and WAEMU separately.

Chapter 03: Research Methodology

3.1 Framework of Monetary Approach to Balance of Payments (MABP)

As explained by Peter (2017), the monetary approach analysis is recognized as the analytical technique used to examine the underlying relationship between a nation's BOP fluctuations and the quantity of money held in its central bank reserves. This connection often arises due to shifts within the money market (Peter, 2017). According to Agu and Nnamani (2020), the inception of the monetary approach dates back to the 1950s and 1960s, attributed to the efforts of the International Monetary Fund research department led by Harry G. Johnson, Jacques J. Polak, and Robert A. Mundell, along with their students at the University of Chicago. Typically, the essence of the monetary approach can be portrayed through a simplified model that establishes a link between the BOP and the dynamics of the monetary market.

First, it should be recalled that the money market is in equilibrium in a situation where the real money is equal to the demand for the real money. That is, when

$$\frac{\boldsymbol{M^S}}{\boldsymbol{P}} = \boldsymbol{L(R,Y)}$$

Now taking F* represents the central bank foreign assets when measurements is undertaken in domestic currency and A as the domestic Assets (domestic credit). If we consider μ as the multiplier of money defining the relationship that exists between the assets of the central bank (F* + A) and the supply of money, then

$$\boldsymbol{M^S = \mu(F^* + A)}$$

The alteration of central bank foreign assets at any duration ΔF^* is equivalent to the BOP for a current nation that is none reserved. Through combing the two equations in the proceeding, the central bank's foreign asset is expressed as follows:

$$\boldsymbol{F^* = \left(\frac{1}{\mu}\right) PL(R,Y) - A}$$

Assuming that μ is a constant, the surplus of BOP is then presented as follows:

$$\boldsymbol{\Delta F^* = \left(\frac{1}{\mu}\right)[PL(R,Y)] - \Delta A}$$

This last equation is primarily a summary of the monetary approach. The first right-hand side term is a reflection of the changes in the demands of monetary money and showcases that a

rise in the demand for money all else equal will result in a surplus in the BOP followed by a rise in the supply chain maintaining the equilibrium of money in the market.

The following components within the BOP equation act as indicators of the supply-related aspects within the monetary market. When there is an increase in domestic credit, it leads to a greater money supply compared to the demand for money. Consequently, in order to restore market equilibrium, the BOP needs to experience a deficit, which helps in reducing the money supply. This highlights a key insight from the monetary approach: it underscores that in various scenarios, the fundamental issues linked to the balance of payments directly stem from disparities in the money market. Therefore, a suitable policy solution often revolves around monetary policy (Mundellm 1971).

3.2 Model Specification

The study aims to undertake an examination of the monetary approach to the balance of payment. In achieving the aforementioned aim, the researchers adopted a net foreign asset as a dependent variable, whereas domestic credit, economic growth, inflation and broad money were considered as independent variables, this can be formulated as follows:

$$\boldsymbol{LNFA_{it} = \beta_0 + \beta_1 DC + \beta_2 GDP_{it} + \beta_3 INF_{it} + \beta_4 LM2_{it} + \varepsilon_{it}} \qquad \textbf{(1)}$$

In Equation 1, whereby $\mathrm{i} = 1,2,\ldots,\mathrm{N}$ several countries. $t = 1,2,3 \ldots, \mathrm{T}$ Denotes, $\mathrm{LNFA_{it}}$ is a log of net foreign assets, $\mathrm{DC_{it}}$ is domestic credit, $\mathrm{GDP_{it}}$ denotes economic growth, $\mathrm{INF_{it}}$ is inflation and $\mathrm{M2_{it}}$ denotes money supply. The whole series was primarily transformed into a natural logarithm except for inflation and GDP and M2. Only net foreign assets were transformed in a logarithm form to ensure the elasticity of the model.

3.3. Estimation Method

3.3.1 Stationarity and Cointegration Tests

Pesaran (2007) introduced the concept of "Cross-sectional Augmented Dickey-Fuller (CADF)" and Pesaran's (2007) CIPS unit root test. These methods are designed to handle situations where there is cross-sectional dependence among variables, providing more reliable outcomes compared to conventional unit root techniques. Additionally, Pesaran's (2004) cross-sectional dependence test (CD) allows for the application of the elastic functional model. This involves incorporating a variety of approaches, including heterogeneous traditional dynamic methods and non-stationary models. Here is the provided specification:

$$\boldsymbol{CD} = \sqrt{\frac{\mathbf{2T}}{\mathbb{N}(\mathbb{N}-\mathbf{1})}}\left[\sum_{\boldsymbol{i}=\mathbf{1}}^{\mathbb{N}-\mathbf{1}}\sum_{\boldsymbol{j}=\boldsymbol{i}+\mathbf{1}}^{\mathbb{N}}\widehat{\boldsymbol{\rho}}_{\boldsymbol{ij}}\right] \qquad \textbf{(2)}$$

In testing for cointegration, Westerlund (2007) and Kao (1999) were applied to determine the long-run association between the variables. The "Westerlund panel cointegration test" have the assumption of the existence of error correction: Gt & Ga (each of the panel members) and Pt & Pa (the entire panel without any common-factor limitation).

3.3.2 Panel ARDL Method

Furthermore, they utilized the "mean group (MG), pooled mean group (PMG), and dynamic fixed effect (DFE)" techniques within the framework of "maximum likelihood estimation (MLE)," which was initially introduced by Pesaran in 1999. One notable advantage of this approach is its capability to mitigate bias arising from endogeneity and serial correlation issues.

$$\boldsymbol{LNFA_{it}} = \boldsymbol{\mu_i} + \sum_{\boldsymbol{j-1}}^{\boldsymbol{p1}} \boldsymbol{\lambda_{ij}}\, \boldsymbol{DC_{it-j}} + \sum_{\boldsymbol{j-1}}^{\boldsymbol{p2}} \boldsymbol{\vartheta_{ij}}\, \boldsymbol{GDP_{it-j}} + \sum_{\boldsymbol{j-1}}^{\boldsymbol{p3}} \boldsymbol{\vartheta_{ij}}\, \boldsymbol{INF_{it-j}} +$$

$$\sum_{\boldsymbol{j-0}}^{\boldsymbol{q}} \boldsymbol{\delta^{i}_{ij}}\, \boldsymbol{M2_{it-j}} + \boldsymbol{\varepsilon_{it}} \quad \textbf{(3)}$$

Where i $= 1,2,3.,,,\mathrm{N}$ is selected countries, $t = 1,2,3 \ldots, \mathrm{T}$ is the annual time span, (j) is time lags, (p) depicts lag of dependent variable lag and (q) depicts lags of regressors. $LNFA\ is\ net\ foreign\ assets,\ DC$ Denotes domestic credit, GDP is economic growth, INF denotes inflation, $M2$ represents money supply and the "vector of controlled indicators" and εit is an error term. Equation (3) can be rearranged as follows:

$$\boldsymbol{LNFA_{it}} = \boldsymbol{\mu_i} + \infty \boldsymbol{LNFA_{it-1}} + \boldsymbol{\beta_i' x_{it-1}} + \sum_{\boldsymbol{j-1}}^{\boldsymbol{p-1}} \boldsymbol{\psi_{it}} \triangle \boldsymbol{LNFA_{it-j}} + \sum_{\boldsymbol{j=0}}^{\boldsymbol{q-1}} \boldsymbol{\delta'^{*}_{ij}} \triangle \boldsymbol{\chi_{it-j}} + \boldsymbol{\varepsilon_{it}}$$

(4)

Where, $\varphi = -1\left(1 - \sum_{j=1}^{p} \lambda_{ij}\right), \beta_1 = \sum_{j=0}^{p} \delta_{ij}\lambda_{ji} = -\sum_{j-1}^{p} \lambda_{im}, j = 1,2..., p -$

1 and $\delta_{ij} = -\sum_{m=j+1}^{p} \lambda_{im}, j = 1,2,..., q-1$

Eq. (4) is modified to write the “error correction parameters”:

$$\boldsymbol{LNFA_{it} = \mu_i + \infty_i(LNFA_{it-1} + \partial_i' x_{it-1}) + \sum_{j-1}^{p-1} \psi_{ij} \triangle LNFA_{it-j} + \sum_{j=0}^{q-1} \delta_{ij}^{'*} \triangle \chi_{it-j} + \varepsilon_{it}} \quad \textbf{(5)}$$

Where $\partial_1 = (\beta_1 / \varpi_1)$ explains the long-run "equilibrium correlation" amid $InBD_{it}$ *and* X_{it}, whilst (ψ_{ji*} and $\delta_{ij}^{*'}$) are the short-run coefficient linked to previous values and other indicators like variation in χ_{it}. To conclude, (ϖ_1) revealed the "error correction coefficient" which shows the "speed of adjustment" $InBD_{it}$ in relation to the "long-term equilibrium" following a variation χ_{it}. For the long-run association to be confirmed a negative and significant coefficient should be observed $(\varpi_i < 0)$. Below is the equation:

$$\hat{\partial}_{PMG} = \frac{\sum_{i=1}^{N} \tilde{\partial}_i}{N}, \hat{\beta}_{jPMG} = \frac{\sum_{i=1}^{N} \tilde{\beta}_i}{N}; \hat{\psi}_{jPMG} = \frac{\sum_{i=1}^{N} \tilde{\psi}_i}{N}, and \hat{\gamma}_{jPMG} = \frac{\sum_{I=1}^{N} \tilde{\gamma}_i}{N} \quad \textbf{(6)}$$

Where, $j = 0, ..., q-1, \tilde{\partial}_{PMG} = \tilde{\partial}$

Equation (7) is driven from Eq. (5):

$$\boldsymbol{LNFA_{it} = \mu_i + \infty_i(LNFA_{it-1} + \psi_1 DC_{it-1} - \psi_2 GDP_{it-1} - \psi_3 INF + -\psi_4 M2_{it-1}) +}$$

$$\boldsymbol{\sum_{j-1}^{p-1} \gamma_j^i \triangle (LNFA_{it})_{t-1} + \sum_{j=0}^{p-1} \delta_{1j}^i \triangle (DC_{it})_{t-1} + \sum_{j=0}^{p-1} \delta_{2j}^i \triangle (GDP_{it})_{t-1} +}$$

$$\boldsymbol{\sum_{j=0}^{p-1} \delta_{3j}^i \triangle (INF_{it})_{t-1} + \sum_{j=0}^{p-1} \delta_{1j}^i \triangle (M2_{it})_{t-1} + \delta_{it}} \quad (7)$$

The panel autoregressive distributed lag (ARDL) framework encompasses three distinct estimators. Initially, the Pesaran, Shin, and Smith (PMG) estimator, which assumes long-term non-heterogeneity while accommodating short-term heterogeneity. The second estimator is the Mean Group (MG) estimator, designed for individual country-level analysis and the DFE (assumes homogeneity constraints in the short and long-run). The Hausman test is used to pick the suitable model between PMG, DFE and MG.

3.3.3 Dumitrescu-Hurlin Panel Causality Tests

The "panel Dumitrescu and Hurlin (2012) casualty test" evaluates the causal relationship between the series. This technique is applicable to panels that are both "heterogeneous and unbalanced." Furthermore, it addresses challenges related to non-homogeneous assumptions and limitations encountered in conventional causality methods. It employs "Monte-Carlo simulation" on a limited dataset to uncover robust findings.

3.3.4 Data Sources and Description

This paper utilised annual panel data from 2005- 2023 of the WAMZ and WAMEU economies. The data on net foreign assets, domestic credit, interest rates, economic growth, inflation and trade openness were acquired from World Bank, World Development Indicators (2019).

Table 1: Explanation of the variables

Variables	Formula unit	Source
$\mathrm{LNFA}_{\mathrm{it}}$	The sum of foreign currency reserve plus gold	World bank
$\mathrm{DC}_{\mathrm{it}}$	Domestic credit to private sector% of GDP	World Bank
$\mathrm{GDP}_{\mathrm{it}}$	GDP growth (annual %)	World Bank
INF_{it}	Consumer price index annual percentage change	World Bank
$M2_{\mathrm{it}}$	Broad money (% of GDP)	World Bank

Source: created by authors

Table 2: Sample Countries

Sample Countries	
UEMOA	WAMZ
Benin	Ghana
	The Gambia
Burkina Faso	Guinea
Cape Verde	Nigeria
Ivory Coast	
Guinea Bissau	Sierra Leone
	Liberia
Mali	
Niger	
Senegal	
Togo	

Chapter 04: Results of Statistical Analysis

4.1: Multicollinearity

The correlation matrix suggests the absence of multicollinearity between the regressors hence the coefficients between the regressors are < 80%.

Table 3: Multicollinearity

Correlation Probability	INF	GDP	DC	M2
INF	1.000000			
GDP	0.058890	1.000000		
	0.3461	-----		
DC	-0.305529	0.087234	1.000000	
	0.0000	0.1624	-----	
M2	-0.154777	0.025923	0.690327	1.000000
	0.0128	0.6786	0.0000	-----

Note: “INF is inflation, GDP is economic growth, DC is domestic credit and M2 is money supply”.

4.2 Unit Root Test

The study at hand employed a Cross-sectional dependence (CD) evaluation to analyze potential cross-sectional dependencies among the variables under investigation. The outcomes of this assessment are presented in Table 4.2. These results reveal that the p-values associated with LNFA, DC, GDP, INF, and M2 are statistically significant. This indicates that the null hypothesis of "no cross-sectional dependence" cannot be accepted. Notably, the CSD (Cross-Sectional Dependence) findings provide substantial empirical support for the presence of cross-sectional dependence in LNFA, DC, GDP, INF, and M2, albeit at varying degrees.

Furthermore, the results from the "Cross-sectional Augmented Dickey-Fuller (CADF)" method introduced by Pesaran (2007) and Pesaran's (2007) CIPS (Cross-sectional Implied Pesaran) unit root test reveal that INF, M2, and GDP exhibit stationarity at level I(0), *while LNFA and*

DC exhibit stationarity at first difference I(1). These outcomes satisfy the criteria for the application of the ARDL (Autoregressive Distributed Lag) model.

Table 4: Unit Root Test

Variables	Level		First Difference		
	CIPS	CADF	CIPS	CADF	CDS
LNFA	-1.194	-1.19	-2.534 *	-2.53*	9.871***
DC	-1.644	-1.64	-3 .327*	-3.23*	8.615***
INF	-2.340*	-2.34*	-3.549*	-3.54*	9.851***
M2	-3.246*	-3.24*	-3.752*	-3.75*	8.984***
GDP	-4.0625*	-4.07*	-4.137*	-4.13*	8.785***

Note: "LNFA is net foreign assets, INF is inflation, GDP is economic growth, DC is domestic credit and M2 is money supply".

4.3: Cointegration

The result from the Kao cointegration test in Table 3, revealed that the variables are integrated in the long run. Moreover, Westerlund panel cointegration (2007) also confirmed the presence of integration among the series in the long run. "The outcomes can be used for the guidance of the cointegration of the whole panel or at least one of them" (Isiksal et al, 2022).

Table 5: Kao Cointegration test

	t-Statistic	Prob.
ADF	-2.431592	0.0075
Residual variance	0.142959	
HAC variance	0.184674	

Westerlund panel cointegration results

Statistic	Value	Z-Value	P-Value
Gt	-8.16	-30.65	0.000
Ga	-0.56	6.67	0.990
Pt	-4.11	3.25	0.000
Pa	-0.29	1.06	0.000

Notes: ** Refer significant at 1%.

4.4: Pooled Mean Group Estimate

The study employed the "Hausman test" to determine the appropriate model among MG, PMG, and DFE. The null hypothesis (H0) that PMG is suitable could not be rejected as the P-value exceeded the 5% significance level. Consequently, PMG estimation was utilized for the analysis. The outcomes presented in Table 4 reveal the results obtained from the short and long-term PMG approach. The findings indicate that both in the short and long run, there exists a negative relationship between domestic credit and Net Foreign Assets (NFA) at a significant level of 1%. Specifically, a 1% increase in domestic credit within the ECOWAS (WAMZ and UEMOA) corresponds to a reduction in NFA by 0.034% and 0.029% respectively. These findings align with Tijani's (2014) conclusions.

Similarly, the study identifies an inverse link between economic growth and inflation with NFA in the short term. This implies that higher GDP and inflation levels result in a decrease in NFA by 0.010% and 0.009% respectively. However, in the long run, economic growth and inflation exhibit a positive impact on NFA, indicating that an increase in GDP and inflation leads to an enhancement in NFA by 0.028% and 0.037% respectively. Conversely, money supply shows a positive effect on NFA. A 1% rise in money supply corresponds to an increase in NFA by 0.054% and 0.026% in the short and long term respectively. Regarding the results of ECT_ (t-1), the production functions transition towards a long-run equilibrium path, with a speed of adjustment of 49.7% from the short run to the long run.

Table 6: Panel ARDL

Variable	MG		PMG		DFE	
	Long term	Sort Run	Long term	Sort term	Long term	Sort term
ECT	----	-0.873 [0.000]*	----	-0.497 [0.000]*	----	-0.438 [[0.000]*
DC	-0.035 [0.990]	-0.118 [0.877]	-0.029 [0.002]*	-0.034 [0.1612]	-0.230 [0.640]	-0.436 [0.106]
GDP	-1.798 [0.000]*	-0.486 [0.413]	0.028[0.0026]*	-0.011 [0.082]*	-0.005 [0.924]	-0.002 [0.924]
INF	-0.284 [0.007]*	-0.362 [0.047]*	0.037 [0.002]*	-0.008 [0.000]*	-0.244 [0.013]*	-0.107 [0.014]*
M2	-1.15 [0.010]*	0.109 [0.653]	0.054 [0.000]*	-0.026 [0.001]*	0.002 [0.486]	-0.0001 [0.183
Constant	69.64 [0.022]*		12.92 [0.004]*		9.350 [0.000]*	
Hausman	1.18 [0.881]				0.77 [0.0002]*	
Observations	280		280		280	
Notes: "ECT: Error Correction Term. *, Denote statistical significance at, 5%. The value of the coefficient is out of brackets".						

4.5: Dumitrescu Hurlin Panel Causality Tests

The existing work used the DH-causality assessment to assess the causal linkage among the focused variables. The outcome of this test is displayed in Table 4.5. The findings illustrated that (t) statistics of the lagged value of the $EC\ term$ affirm the existence of a causal link in the long run among, $GDP, INF, M2, and\ LNFA$. In addition, the outcomes confirmed that approved that there is a feedback causal connection between $LNFA\ and\ DC$. Moreover, one-way causation moving from $LNFA\ to\ M2$ was affirmed. However, the link between $LNFA,$ $GDP, and\ INF$ was found to be neutral in the case of WAMZ and UEMOA. Therefore, the existing work approved that credit significantly affected the BOP through money supply channels.

Table 7: Pairwise Dumitrescu Hurlin Panel Casuality Tests

Lags: 2

Null Hypothesis:	W-Stat.	Zbar-Stat.	Prob.
DC does not homogeneously cause LNFA	4.61200	2.63127	0.0085
LNFA does not homogeneously cause DC	4.56183	2.57128	0.0101
M2 does not homogeneously cause LNFA	2.15960	-0.30475	0.7606
LNFA does not homogeneously cause M2	5.39820	3.55616	0.0004
GDP does not homogeneously cause LNFA	3.31232	1.07694	0.2815
LNFA does not homogeneously cause GDP	2.77327	0.43228	0.6655
INF does not homogeneously cause LNFA	1.54297	-1.03907	0.2988
LNFA does not homogeneously cause INF	2.41064	-0.00140	0.9989

Chapter 05: Conclusion

The main objective of this study was to investigate the applicability of the monetary approach to the Balance of Payments (BOP) within the WAMZ and the UEMOA. The central focus of the research was to explore the relationship between domestic credit and net foreign assets (NFA), with a specific emphasis on how changes in the money supply influence the BOP. The overarching aim was to confirm the principles of the monetary approach to the BOP in these regions.

In order to achieve this objective, the study employed a robust methodological framework. It utilized advanced unit root tests of the second generation, namely the Common Augmented Dickey-Fuller (CADF) test and the Cross-sectional Augmented IPS (CIPS) test, to account for potential cross-sectional dependencies among variables. Furthermore, the Westerlund cointegration test was applied to identify any long-term relationships among the relevant data series. The study's analysis covered the time period from 2005 to 2019.

Both short-term and long-term analyses are conducted using the dynamic homogeneous panel estimator. The empirical findings substantiate monetary approach validity to the BOP. The Pooled Mean Group (PMG) results reveal that, over the medium and extended temporal horizons, enhancements in domestic credit within the WAMZ and UEMOA are accompanied by a concomitant reduction in net foreign assets. In simpler terms, an increase in credit growth appears to contribute to a deficit in the BOP.

Similarly, the study unearths an inverse association between growth of the economy and inflation with net foreign assets in the short run. Nevertheless, over the long term, economic growth and inflation exhibit a positive impact on net foreign assets. This presents the implication that an escalation in income levels within the zones is associated with an enhancement in the BOP position. Consequently, judicious macroeconomic policies are imperative to rectify any imbalances within the BOP.

Conversely, the analysis highlights a positive correlation between money supply and net foreign assets in both the short and long run. This signifies that a rise in the money supply has a favourable effect on net foreign assets.

The monetary approach to the BOP seems to be a very useful tool, it needs to be used while being cautious in seeking solutions and alternatives for macroeconomic challenges. As seen in the paper, the MABP is far much essential in the formulation of solutions towards policy

problems which are primarily a direct shift and result in the demands of the domestic money supply.

As elucidated within the paper, the examination of the MABP in both WAMZ and UEMOA nations reveals a range of practical scenarios wherein its analysis may potentially lead to misguided and circuitous policy recommendations. For instance, a transient decline in foreign demand for domestic products culminates in a subsequent reduction in the current account and overall BOP. Nevertheless, these apparent effects can be offset in situations where stringent capital account restrictions are not in place, or where they are temporarily counterbalanced by an expansionary fiscal policy.

Furthermore, the impact of changes in output and subsequent shifts in money demand can amplify the significance of the monetary approach in anticipating BOP deficits, which in turn contribute to a decline in export demand. However, it would be an oversimplification for policymakers to conclude that rectifying a BOP deficit solely necessitates a contraction in domestic credit. In the context of central banks opting to curtail domestic credit as a strategy to bolster the BoP, unintended consequences such as heightened unemployment or persistent employment challenges might emerge in both the WAMZ and WAEMU countries.

In essence, the intricacies of real-world economic dynamics underscore that a nuanced and multifaceted perspective is indispensable when employing the Monetary Approach to Balance of Payments as a policy guide. The interplay between various economic factors and potential repercussions necessitates careful consideration to ensure that policy actions align with the broader goals of economic stability and growth within the context of WAMZ and UEMOA nations.

Chapter 06: Recommendations

Typically, the monetary approach to BOP puts significant emphasis on BOP problems resulting directly from the imbalances in the money market and the monetary policy. It might be depicted that the approach is appropriate in analysing the monetary phenomenon in the areas under study because it results in the understanding that a large deficit of BOP might lead to the creation of excessive domestic credit. To significantly reduce the latter, it is recommended that the ECOWAS region strives to grow *what it eats and eats what it grows* to help reduce external shocks emanating from high import bills and other unproductive FDI flows.

Monetary policy should exercise vigilance regarding the potential environmental repercussions stemming from financial policies. While the region necessitates an expansion of its financial sector, this progression should be undertaken cautiously, taking into account the adverse ecological consequences. It is imperative to identify and proactively prevent investments that contribute to pollution, particularly by policymakers who can leverage sound financial strategies.

Recognising the imperative of sustainable economic growth, policymakers must acknowledge that environmental degradation can significantly impair both the quantity and quality of production. Given the predominant status of these nations as net importers, preserving the natural environment becomes paramount to ensure future production capacity and sustain livelihoods. Hence, policy decisions should be imbued with a long-term perspective that emphasises environmental preservation.

There exists a prospect for further investigation in this domain. Future studies could encompass the entirety of the African continent or incorporate additional financial and economic variables. By expanding the scope of inquiry, a more comprehensive understanding can be gleaned regarding the intricate interplay between monetary policy, the balance of payments, and the broader economic and environmental dynamics. Such research endeavours would undoubtedly enrich our comprehension and facilitate more informed policy formulation in the pursuit of sustainable development.

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