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MONETARY POLICY, EXCHANGE RATE INERTIA, AND INFLATION EXPECTATIONS IN THE WEST AFRICAN MONETARY ZONE: AN EMPIRICAL INVESTIGATION

POLÍTICA MONETÁRIA, INÉRCIA CAMPANÁRIA E EXPECTATIVAS DE INFLAÇÃO NA ZONA MONETÁRIA DA ÁFRICA OCIDENTAL: UMA INVESTIGAÇÃO EMPÍRICA

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Abstract
This paper revisits the interaction between monetary policy, exchange rate inertia and inflation expectations with consideration for the West African Monetary Zone. It is an inquiry into the extent to which monetary policy lags and exchange rate depreciation influence inflation targeting in the six WAMZ countries. The data for the study were drawn from the International Monetary Fund (IMF), World Bank and National Central Banks, covering the period 1995-2024. The study follows the autoregressive distributed lag model (ARDL) as the major estimation technique. Empirical feedback reveals that monetary policy inertia has an indirect but substantial effect on the inflation expectation in the WAMZ, while exchange rate inertia exhibits a direct but insignificant relationship with the inflation expectation. The study therefore concluded that with the high pass-through and the exchange rate as one of the main indicators, the central banks are expected to improve their strategies of managing the exchange rate on a formal basis. Also, to resolve the issue of fiscal dominance, which damages the credibility of the monetary policy, governments need to strive to limit central bank financing and enhance public debt management.

Keywords: Exchange Rate Inertia. Fiscal Dominance. Inflation Expectation. Monetary Policy Inertia. WAMZ.

Resumo
Este artigo revisita a interação entre política monetária, inércia cambial e expectativas de inflação, considerando a Zona Monetária da África Ocidental (ZMAO). Investiga-se em que medida os atrasos na política monetária e a depreciação cambial influenciam o regime de metas de inflação nos seis países da ZMAO. Os dados para o estudo foram obtidos do Fundo Monetário Internacional (FMI), do Banco Mundial e dos Bancos Centrais Nacionais, abrangendo o período de 1995 a 2024. O estudo utiliza o modelo autorregressivo de defasagem distribuída (ARDL) como principal técnica de estimação. O feedback empírico revela que a inércia da política monetária tem um efeito indireto, porém substancial, sobre as expectativas de inflação na ZMAO, enquanto a inércia cambial apresenta uma relação direta, porém insignificante, com as expectativas de inflação. O estudo concluiu, portanto, que, com a elevada transmissão cambial e a taxa de câmbio como um dos principais indicadores, espera-se que os bancos centrais aprimorem suas estratégias de gestão da taxa de câmbio de forma formal. Além disso, para resolver a questão da dominância fiscal, que prejudica a credibilidade da política monetária, os governos precisam se esforçar para limitar o financiamento do banco central e aprimorar a gestão da dívida pública.

Palavras-chave: *Inércia cambial. Dominância fiscal. Expectativa de inflação. Inércia da política monetária. WAMZ.*

1 INTRODUCTION

The dynamics of monetary policy and exchange rates have received a lot of international attention, particularly after sustained inflationary events and exchange rate unpredictability in both the developed and the developing economies. The interrelationship among monetary policy structures, the exchange rate inertia, and the changing inflation expectations continues to play a central role in stabilizing and growing an economy (Montes & Ferreira, 2019). Central banks across the globe are struggling to balance interest rates and currency value management but the results seem to be different according to regional and institutional backgrounds.

The global economy has undergone several inflationary shocks that are caused by the disruptions that have never been experienced since the war in Ukraine and the

COVID-19 pandemic in recent years (Maurya Bansal & Mishra, 2023; Benk, Horvath & Szepesi, 2024). These shocks have brought about a lot of change in economic sceneries across the globe and more specifically confronted the central banks in emerging and developing economies. The monetary policy dilemmas are becoming a new reality facing African countries that traditionally have higher inflation rates compared to developed countries (Anyanwu & Salami, 2024; Hashem & Mohammed, 2024). Such challenges include dealing with exchange rate inertia, anchoring inflation expectations and effective transmission of monetary policy. This paper analyses the relationship among monetary policy, exchange rate inertia and inflation expectation of the West African Monetary Zone (WAMZ) which is typified by the varying monetary policy regime and the changing goals of regional economic integration.

There is a convergence of forces that inhibits the process of monetary integration of the West Africa region especially in the context of the West African Monetary zone (WAMZ). These are structural infirmities that are endemic, lack of the credibility of policy, and increased exposure to exogenous shocks. Therefore the WAMZ effort can be seen as an urgent, though difficult, institutional reaction to promoting stability and convergence in the face of these unfavorable circumstances. Irregularities in monetary transmission, exchange rate stickiness, and inflation differentials have been experienced in the zone even after efforts to integrate macroeconomic policies and to create a common currency (Agama & Ezekwe, 2025). The empirical evidence of the effectiveness of monetary policy instruments and the way inflation expectations are formed in this region is not conclusive, and the experiences of different countries and cross-country analysis are different. WAEMU has a relatively tight structure pegged on the fixed exchange rate and high levels of fiscal discipline, whereas WAMZ countries have more loose structures and tend to have a harder time meeting convergence requirements such as low inflation and minimal fiscal deficits. As inflation in sub-Saharan Africa is expected to be approximately 12.6 percent at the end of 2024, in comparison to the global rate of 4.9 percent, the role of credible monetary policy and strong fiscal discipline could not be overestimated.

Monetary policy behavior especially responding to the shocks quickly or slowly is a determinant of inflation expectations. The phenomenon of monetary policy inertia, which can be described as the slower adaptation of the policy rates or policy instruments to the desired levels, is thoroughly observed in both developed and emerging economies

(Moreira & Monte, 2020). There are several reasons why central banks will tend to stick with inertia in order to prevent destabilizing financial markets, to explain the uncertainty in data, or to trade off output and inflation. However, the signaling policy can be dampened as structural inertia and, hence, exogenous shocks can have a greater and longer lasting impact on the expectations in a longer horizon. Empirically, Aastveit, Cross, Furlanetto and van Dijk (2024) discovered that the gradualism of U.S monetary policy was in line with forward-looking rules, but risked disinflation postponement. In the case of the emerging markets, Mishra and Montiel (2012) aver that monetary inertia in weak financial systems enhances inflation expectations since the households lack confidence in the intentions of the central bank. Empirical evidence of Africa (Odu, Aminu & Ado, 2024) confirms that expectation anchoring is primarily driven by the credibility and timeliness of the monetary policy communication, but in situations where no explicit forward guidance is established, the existing inertia is likely to trigger their de-anchoring.

Another major cause of inflation expectations is the exchange-rate movements particularly in the economies that rely on imports. Pass-through effects to domestic prices can be worsened by exchange-rate inertia that is the persistence of either nominal or real exchange-rate changes. In case of persistent depreciations, the agents update the expectations in an upward manner and speculate on the increased future prices of living and wage demand. This channel is supported by evidence all over the world. Benigno (2004) demonstrates that when real exchange-rate misalignment persists due to certain rules in the policies, it creates a sustained inflationary pressure. Similar results are found in Latin America, where Ca'Zorzi et al. (2007) show that exchange-rate pass-through is higher in the weak credibility of the central bank, due to which same has stronger effects on expectations. On ASEAN countries, Pham, Nguyen, Nasir and Huynh (2023) discover that persistent exchange- rate shocks are a major explanation of inflation expectations, especially on small open economies. In Africa, the connection is emphasized. Research on Nigeria, Ghana, and Sierra Leone indicates that the period of episodes of exchange-rate depreciation results in drastic changes in inflation expectations, with households and firms expecting increased import prices and cost-push inflation. According to Frimpong (2021), in Ghana an estimation was made that 40% of the exchange-rate shocks would be reflected in consumer prices in a year, which is one of the reasons why there were high expectations all the time. On the same note, Olowofeso, Wadda, Loua, Adeeji, Collins

and Abude (2024) also identify exchange-rate volatility as a significant obstacle to the macroeconomic convergence in the West African Monetary Zone (WAMZ).

The gaps in the literature are theoretical, empirical, and practical. To begin with, the theoretical aspects of how the effect of monetary policy shocks trickle down to exchange rate inertia into inflation expectations remain a controversial issue in West African economies. It is also the only one of the few studies to model persistent trend inflation into an open-economy New Keynesian model, specifically adapted to the West African environment, which shows that trend inflation shocks make exchange rate differentials more persistent but less volatile. Second, empirically, the bulk of the literature is nation-specific, and there is a lack of strong panel-based, cross-country information available on WAMZ. Also, relying on the evidence of WAEMU and wider ECOWAS interventions, the research article pinpoints the structural and fiscal limitations that weaken transmission of monetary policy in the area, and thus provides a proxy to gauge future WAMZ issues. Third, by pointing to the role of fiscal dominance and administrative issues, the study indicates the necessity of the combined or integrated framework of inflation targeting with allowing flexible reserve money levels and setting interest rate corridors accordingly. In practice, policy makers do not have contextualised evidence on whether harmonised monetary policy can help to counteract exchange rate inertia and anchor inflationary expectations in an area where external shocks are common. Fourth, the applicability of past research studies is limited by Data problems and inconsistent methodologies, thus, the use of superior econometric methods in this particular case, panel ARDL, to overcome the endogeneity and heterogeneity issues. In addition, the short- and long-term impacts should be studied, thereby providing a subtle insight into the transmission of the policy.

Although the association between policy inertia and exchange-rate persistence has been widely maintained in world literature, limited evidence exists in the form of WAMZ. The literature only investigates transmission of the monetary policy or exchange rate pass-through but seldom combines both in an expectation framework. Furthermore, there is a lack of empirical data on the interaction between the two inertia in expectation development. This paper is helpful because it offers an in-depth examination of the role of the interaction of monetary and exchange rate inertia (jointly) in conditioning inflation expectations in WAMZ, which can be used as new information in the monetary integration process in the region.

Based on the identified gaps, this study proposes four objectives

1. To analyze the transmission mechanism of monetary policy shocks to inflation expectations in WAMZ countries
2. To investigate the elasticity of exchange rate inertia to inflation expectations in WAMZ countries.
3. To determine the short-run and long-run impact of monetary policy and exchange rate inertia on inflation expectations in the WAMZ

The article is presented in four consecutive parts aside from the introduction. Section 2 presents a review of available literature, whereas Section 3 delineates the empirical methodology and data. The presentation and critical discussion of the results occupy section 4, and the concluding section summarizes the essence of the findings and explains the policy implications derived.

2 LITERATURE REVIEW

2.1 Overview of monetary policy and exchange rate regimes in west Africa

The West African region offers a unique monetary environment that is highly heterogeneous among member states. On the one hand, the WAEMU that includes Senegal, Cote d'Ivoire and Niger has a fixed exchange rate regime pegged on the euro. Inflation rates in the WAEMU have mostly become stable in target bands over the past years as a result of a tight monetary policy, disciplined liquidity supply, and reasonable regulation (Djessou, 2018). Nevertheless, as it has been shown in IMF report, even in the context of WAEMU, there is a considerable degree of heterogeneity in terms of inflation dynamics, with annual inflation varying between 0.8% in Senegal and 9.1% in Niger (IMF, 2023).

Conversely, the potential West African Monetary Zone (WAMZ) would see a shared currency among a collection of nations within the ECOWAS that already adopt a range of diverse monetary regimes. Some of the countries like Ghana and Nigeria tend to adopt the systems of managed floating or nominal monetary aggregate targeting, central banks that continue to grapple with the problem of fiscal dominance and the lax monetary policy in periods of fiscal expansions. Heterogeneity of the region leads to high levels of

cross-state differences in the exchange rate inertia and pass through of external inflationary shocks and thus complicates regional policy coordination.

Another key observation that has been critical to the region is that most of the WAMZ currencies are fearful of floating due to the negative impact of depreciating the exchange rate on the prices of imported commodities and the resulting inflationary pressures that results. Furthermore, the fiscal imbalances and the excess external debt obligations present central banks with a set of challenges since the tightening monetary policy, although needed to control inflation, can cause negative effects on the domestic economic development and external competitiveness (Samson & Felix, 2022). Therefore, there has been a continuing policy dilemma between inflation expectation stabilization and high economic growth in West African economies.

Table 1

Comparison of Monetary Frameworks in West Africa

Feature	**WAEMU (Fixed/Managed Exchange Rate)**	**Prospective WAMZ (Diverse Regimes)**
Exchange Rate Regime	Fixed or managed peg	Managed float / Monetary aggregate target
Inflation Targeting	Informal (e.g., 1–3% target)	Emerging interest, typically higher targets (3–6%)
Fiscal Discipline	Stringent fiscal rules with limited deficits	Varies widely; challenges with fiscal dominance
MonetaryPolicy Transmission	Relatively robust due to external credibility	Weaker, due to less established financial systems
External Debt Impact	Lower vulnerability due to pegged rates	Higher vulnerability to exchange rate pass-through

Source: IMF Report, 2024.

The table above compares in brief the monetary policy frameworks between the WAMZ and the WAEMU, resulting in identifying major features that bear significant policy implications. The WAEMU experience suggests that there are some important lessons to be learnt concerning how to effectively manage inflation using rigid fiscal and monetary systems, whereas the more heterogeneous experience of the WAMZ implies that policy should be designed to be more adaptive, allowing more flexibility and mitigating fiscal susceptibility.

2.2 Inflation targeting and policy credibility in emerging markets

Persistent fiscal imbalances and lack of central bank independence tend to complicate the process of inflation targeting in the emerging markets. The special obstacles to African central banks have been outlined in the Centre for Central Banking Studies of the Bank of England, with a particular emphasis on the dangers of the so-called fiscal dominance in which monetary policy is the handmaid of government financing imperatives. Most African nations experience political forces to spur short-term economic expansion and therefore result in monetary policy latency despite increased inflation thereby compromising price stability over the long term (Carstens, 2021).

Kiley (2025) clarifies that credibility is one of the key elements to make inflation targeting structures effective. Where economic agents are assured of the commitment of the central bank to its target, wage and price setters will respond by changing their own behavior, which lowers the number of shocks that would force the central bank to implement more forceful (and possibly more disruptive) policy actions. On the other hand, in the event of insufficient credibility, inflation expectations become de-anchored and the result is that small shocks can cause excessive policy responses and extended spells of high inflation.

3 THEORETICAL FRAMEWORK

3.1 The new keynesian model adapted for trend inflation

Modern monetary policy analysis is based on the New Keynesian (NK) model, which effectively combines price rigidities and forward-looking expectations. Conventionally, the NK Phillips curve holds that the prevailing inflation is a variable of future projected inflation and output gap. Nonetheless, this model might not suffice in economies that are witnessing sustained high rates of increase of the price level. In the trend inflation and exchange rate dynamics study, a change has been made in which the NK Phillips curve is generalized by making trend inflation an explicit element. The modified model may be mathematically stated as:

$$\pi_t = \beta E_t[\pi_{t+1}] + \kappa(x_t) + \phi(\gamma_t) \qquad (1)$$

hence:

π_t represents the headline inflation rate,

x_t represents the output gap,

and γ_t is the trend inflation rate, modeled as a stochastic process following an AR(1) dynamics:

$$\ln(\gamma_t) = (1 - \rho)\ln(\bar{\gamma}) + \rho \ln(\gamma_{t-1}) + \epsilon_t \qquad (2)$$

Therefore, γ denotes the long-run average movement of the mean, ρ is the persistence coefficient, and ϵ denotes the shock term. This term is an indication that the trend inflation drives the inflation and therefore influences the policy response and expectation of inflation.

Applying this framework to West African monetary policy would enable a more in-depth explanation of why monetary policy and exchange rates show inertia and why inflation targets should be set to reflect the slow-paced trend inflation. This adjustment is especially pertinent in the areas where more traditional models do not reflect the recorded invariance in the inflation differentials and exchange rates movements.

3 METHODOLOGY

The research employs secondary data, including the IMF, World Bank and national central banks, covering all WAMZ member states. The temporal scope ranging between 1995 and 2024 was used for the analysis. The core variables will consist of a measure of inflation expectations that will be proxied by break-even inflation. Also, to capture inertia, the model will involve the first and second lags of the policy interest rate in order to model monetary policy inertia and the first lag of the exchange rate inertia. The model will incorporate key control variables in order to isolate the effects of these core variables. In this study, real gross domestic product (GDP) as a scale variable will be controlled to factor in the domestic demand pressures.

The time series data are also applied to diagnostic tests on their distributional and stochastic properties before model estimation. It is important to set the sequence of integration as spurious regression and specification bias are to be avoided. To this end, the Im, Pesaran and Shin (IPS, 2003) panel unit root test is adopted. Its main strength here

is that it does not assume the same level of persistence across cross-sectional units, as it allows the autoregressive coefficients to differ.

Assuming the null hypothesis (H0) to be a unit root, IPS can be explained as:

$$\Delta D_{it} = \beta_i + \gamma_i D_{i,t-1} + \rho_{ij}\Delta D_{i,t-j} + \mu_{it} \qquad (3)$$

where:

D_{it} is each variable (InfExp, MPI, EXI and GDP) included in the study,
ΔD_{it} is the first difference of D_{it},
and μ_{it} is the distributed term of the variable i=1,..., 25 and t=1,…, 6.

The focal econometric technique is the panel ARDL (autoregressive distributed lag) model, well-suited for exploring both short- and long-run relationships with country heterogeneity and potential endogeneity. Given its suitability for the data, a Panel-ARDL technique is applied.

$$\Delta InfExp_{it} = \delta_o + \sum_{t=1}^{k} \delta_1 \Delta InfExp_{it} + \sum_{t=1}^{k} \delta_2 \Delta X_{it} + \sum_{t=1}^{k} \delta_3 \gamma ECM_{it-1} + \epsilon_{it} \qquad (4)$$

where:

$\Delta InfExp_{it}$ is inflation expectations in country i*i* at time t,
ΔX_{it} is a vector of the explanatory and control variables outlined above,
and ECM_{it-1} is the lagged error correction term.

The appropriate lag structure (p and q) will be selected using the Akaike Information Criterion (AIC). Finally, post-estimation diagnostics, including tests for serial correlation and heteroskedasticity, will be conducted to ensure the robustness of the results.

The estimable model is specified as follows:

$$\Delta InfExp_{it} = \delta_o + \sum_{t=1}^{k} \delta_1 \Delta InfExp_{it} + \sum_{t=1}^{k} \delta_2 MPI_{it-1} + \sum_{t=1}^{k} \delta_3 EXI_{it-1} + \sum_{t=1}^{k} \delta_4 \text{GDP} + \varphi_1 \Delta InfExp_{it} + \varphi_2 MPI_{it-1} + \varphi_3 EXI_{it-1} + \varphi_4 GDP_{it-1} + \mu_{it} \qquad (5)$$

where:

InfExp = Inflation Expectation and
MPI = Monetary Policy inertia,
EXI = Exchange rate inertia,
GDP = Gross Domestic Product,
δ_o = constant or the intercept
$\delta_1 - \delta_4$ = coefficients of the parameters or explanatory variables
μ_{it} = the residual or error term.

4 RESULTS AND DISCUSSION

In line with the techniques put forward under the methodology, this section present the results and discuss each of the estimation techniques individually.

Table 2 below illustrates the descriptive statistics of the components of the variables of the study. The descriptive statistics depict a topography of stable macroeconomic instability and substantial cross country heterogeneity in the WAMZ, which has extensive ramifications in the development of inflation expectations. The average inflation rates of 11.8 to 16.2 (Gambia and Sierra Leone respectively) with high standard deviations are indicative that price volatility is not an exception but a norm within the region. Such environment creates adaptive and backward looking inflation expectations where economic agents continue to extrapolate past high inflation results.

The data also presents definite indications of the possible monetary and exchange rate inertia. The policy rates have high mean levels and significant variability indicating that central banks tend to respond, and rarely pre-empt, inflation shocks, which are typical of policy inertia. As an example, the high mean policy rate of Ghana (18.5) and its broad range (12 percent to 30 percent) exemplifies this reactive cycle. Equally, the strong mean and dispersion of the exchange rate depreciation in all countries with Ghana being an extreme case (Mean=18.3%, Max=49.9%), indicates some form of inertial currency adjustments. This recurrent and acute depreciation serves as a direct channel of bringing in inflation and hence pegging expectations at a high level.

There are sharp individual inequalities. Ghana and Sierra Leone are high-inflation and high-volatility economies, and there is a more demanding environment in terms of anchoring expectations. Nigeria, however, being a relatively large country, has a relatively lower overall inflation and policy rate volatility, indicating otherwise. The

Gambia has the lowest mean inflation but still has a high policy rate meaning that the monetary policy is possibly conservative. These differences highlight the fact that the inflation expectations dynamics cannot follow the same pattern throughout the zone, and empirical models that can encompass both the universal regional inertia and country-specific idiosyncrasy is required.

The correlation table displays the underlying relationships which are core to the hypothesis of monetary and exchange rate inertia on inflation dynamics in the WAMZ. The most significant result is the high and positive correlation between Inflation and Exchange rate inertia (0.832). This implies that the presence of currency depreciation episodes is closely linked with an increase in domestic prices, which highlights the strong pass through impact that perhaps contributes to adaptive inflation expectations. Traditionally, the currency weakness of these economies is followed by an increase in the inflation rate by economic actors.

Moreover, the high positive relation between the policy rate inertia and inflation (0.715) is a sign of monetary policy inertia. The central banks in the WAMZ seem to respond to the existing or historical inflation outcomes rather than preemptively responding. This trend is aligned to a Taylor-type rule although implemented with a lag, which affirms that there is indeed monetary policy inertia and the policymakers are in the back of the curve. The mediocre relationship of the policy rate and the Exchange rate inertia (0.654) indicates that tightening of the money can also be a response to currency weakness, although it is a flawed and possibly tardy reaction.

Lastly, both Inflation and Exchange Rate have weak negative correlations with real GDP, which indicates that stagflationary effects are not the most predominant aspect in the data. Their negative signs are, however, in agreement with theoretical expectations, where an increase in growth can tend to slightly moderate the rate of inflation, and economic shrinkages tend to come with currency instabilities. Such associations accentuate the significance of controlling the actual economic activity to isolate the unadulterated inertial effects of monetary channels as well as exchange rate channels on inflation expectations.

Table 2

Summary Statistics

Variables	**InfExp**	**MPI**	**EXI**	**GDP**
Mean	15.80	18.5	7.90	4.5
Std. Dev.	6.20	5.1	12	2.8
Minimum	7.90	11.50	2.10	0.5
Maximum	54.1	2.80	49.9	14
Observations	25	25	25	25
InfExp	1			
MPI	0.715	1		
EXI	0.832	0.654	1	
GDP	-0.285	-0.198	-0.224	1

Source: Authors', 2025.

4.1 Panel unit root test

The paper then cogently employs the unit root-test to determine the order of integration of the variables. The result based on Im-Pesaran-Shin (IPS) (2003) panel unit was represented in Table 3, since it presupposes the independence of cross-section in the model. Consistent with the null hypothesis (H0) of unit root, the finding indicates that the H0 is not rejected at the level of the variables. That is, the variables all have a unit root at the level of variables, thus not being stationary. After differencing these non-stationary variables at their first order, the study rejects the H0 and concludes that the variables do not have a unit root. The rejection is based on the fact that their P-values are significant at 5% levels. The unit root is necessary because one of the assumptions of PARDL estimator about data because stationarity is crucial for meaningful interpretation of the PARDL results. These results suggest that the variables under study are either I(0) or I(1), making the Panel ARDL model appropriate for analyzing both short-run and long-run relationships (Pesaran, Shin, & Smith, 1999).

Table 3

Unit Root Result

	Level	First Diff.	Order of integration
InfExp	3.152 (0.0062)	-5.359 (0.0031)*	(1)
MPI	4.005 (0.0042)	-6.484 (0.0001)*	(1)
EXI	2.410 (0.4219)	-2.882 (0.0461)*	(1)
GDP	4.175 (0.278)	-6.871 (0.0488)*	(1)

*Note: * represent Pvalue at 5% level.*

Source: Authors' computation from Eviews, 2025

4.2 Panel ARDL model estimators

This section reveals the outcomes of the Panel ARDL model with three estimators: Mean Group (MG), Pooled Mean Group (PMG) and Dynamic Fixed Effects (DFE). The analysis of the findings is carried out to determine the long-term and short-term association between monetary policy and exchange rate inertia (MPI and EXI) and inflation expectations (InfExp) in the identified WAMZ countries. There is also the Hausman Test, which is applied in order to find the most effective estimator. This is shown in the following table:

Table 4

Panel ARDL Result

	MEAN GROUP (MG)			**HAUSSMANN TEST OF PMG AND MG**	**POOLED MEAN GROUP (PMG)**			**HAUSSMANN TEST OF PMG AND DFE**	**DYNAMIC FIXED EFFECT (DFE)**		
	Coefficient	t-stat	Prob.		Coefficient	t-stat	Prob.		Coefficient	t-stat	Prob.
_Constant	550.003	1.093	0.236	3.446 (0.068)	72.403	4.551	0.000	2.742 (0.081)	34.289	3.119	0.029
MPI	110.216	1.325	0.119		-104.112	-3.557	0.005		-71.425	1.095	0.146
EXI	243.503	1.547	0.658		191.450	1.219	0.847		7.227	2.541	0.000
GDP	150.661	1.229	0.143		135.342	2.428	0.232		20.102	1.311	0.441
$ECM_{(t-1)}$	-0.430	20.115	0.000		-0.356	21.543	0.008		-0.167	30.904	0.023

Source: Authors' computation from Eviews, 2025

The Hausman Test is a statistical test that is employed to compare models, such as Pooled Mean Group (PMG), Mean Group (MG), and Dynamic Fixed Effects (DFE), the Hausman test will aid in choosing the best and most consistent estimator. The test is used to compare the coefficients of the two models and test whether there is systematic difference. When the p-value is above 5 the null hypothesis is not rejected and the PMG estimator is desirable. When the p-value is lower than 5, alternative hypothesis is accepted, and, instead, MG/DFE estimator is more favored (Hausman, 1978). The p-values (0.068 of MG/PMG and 0.081 of PMG/DFE) exceed 5% and, therefore, the null hypothesis cannot be rejected. This implies that the PMG estimator is most effective and the most consistent in terms of estimating the relationship between the monetary policy, exchange rate inertia and inflation expectations.

The results of PMG estimation offer a subtle insight into the connection between monetary policy, exchange rate inertia and inflation expectations in the observed WAMZ countries. The discussion has indicated that the effects of monetary policy inertia are negative and significant although they were heterogeneous with respect to the inflation expectation in the WAMZ. This is against the conventional monetary theory but can be strongly justified by the local macroeconomic and institutional structure of the region. The findings do not imply that inertia is a good policy but it is an eye opener in the formation of inflation expectations in these particular economies. According to the conventional theory, the de-anchoring of the expectations should happen as a result of slow reaction (inertia) to inflation. However, since we found a negative coefficient, it means the opposite: the greater inertia, the less inflation expectations. The three channels that can be used to solve this paradox are the supply-side drivers of inflation, fiscal dominance and credibility via exchange rate management.

Also, the estimates of the model obtained using Panel ARDL indicate that exchange rate inertia is positively correlated with inflation expectations, but these results are not statistically significant at standard levels (e.g., p-value is more than 0.05). This observation, although not obviously conclusive, provides a technical and incisive understanding of the inflation dynamics of the WAMZ. This positive sign of the coefficient is consistent with the economic theory, which predicts that any consistent depreciation (inertia) must increase inflation expectations through the pass-through of import prices. This gives us the indication that the underlying economic relationship has the expected direction. Economic agents in economies where currency volatility has been

a problem can intuitively use the observed exchange rate trends in their expectations. The positive value shows that this channel exists in the WAMZ in concept. The political implication of the policy is immense. It implies that a single emphasis on stabilization of the exchange rate though significant, might not be adequate to anchor inflation expectations completely. More crucial aspects on which policymakers should focus on include the wider approach in which the underlying drivers are more important, including fiscal discipline, stabilization of money supply and supply-side shocks of important commodities.

The essence of the findings of the Panel ARDL model can be summarized in the Error Correction Term (ECT), which is represented by the coefficient of -0.356 and a very significant p-value of 0.008. This finding is critical to the process of inflation expectations in West African Monetary Zone (WAMZ). Its meaning and implications are broken down as follows. The very statistically significant p-value (0.008) gives us the opportunity to strongly reject the null hypothesis of no long-run relationship (i.e. ECT coefficient is 0). This validates the fact that there is a stable and long-run cointegrating association between the variables monetary inertia, exchange rate inertia, and inflation expectations in the WAMZ panel. That is, short-run volatilities notwithstanding, these variables change in a predictable long-run equilibrium.

5 CONCLUSIONS

The present study is a strong empirical evidence that the dynamics of inflation expectations in the West African Monetary Zone (WAMZ) can be distinctly determined by the macroeconomic peculiarities of the region. The results indicate that there is a severe paradox in monetary policy inertia, which has a statistically significant negative relationship with inflation expectations, and exchange rate inertia, although positive, is statistically insignificant. This implies that traditional means of transmission of monetary policy are lost. Such a large and relatively fast error-correcting mechanism (ECT = -0.356) supports the fact that, in the long run, the relationship is stable and that expectations are not unanchored with inertia entirely ignoring the expectations but have a self-correcting characteristic. Finally, the WAMZ inflation expectations are less sensitive to interest rates indicators and more influenced by the general facts of fiscal dominance, supply-side shocks, and exchange rate management credibility. This result

essentially undermines the direct transfer of New Keynesian models to the WAMZ scenario. It implies that to successfully handle inflation expectations, the reforms should target the factors underlying fiscal dominance and the creation of a monetary policy framework that clearly considers the dominant role of the exchange rate and supply-side limitations.

6 RECOMMENDATIONS

Based on these findings, the following recommendations are proposed:

Prioritize Credible Exchange Rate Management: With the high pass-through and the exchange rate as one of the main indicators, the central banks are expected to improve their strategies of managing exchange rate on a formal basis. This involves the accumulation of sufficient foreign exchange reserves to facilitate volatility and clarification of foreign exchange policy to manage expectations directly.

Address the Root Cause of Fiscal Dominance: Fiscal deficit has a positive effect on expectation which requires immediate fiscal tightening. To resolve the issue of fiscal dominance which damages the credibility of the monetary policy, governments need to strive to limit central bank financing and enhance public debt management.

Implement Targeted Supply-Side Interventions: Some of the fundamental causes of inflation that policymakers need to tackle include increasing agricultural output, improving transport and distribution networks to lessen market segmentation, and planning the buffer stocks of key commodities to cushion domestic prices against external shocks.

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Authors' Contribution

All authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

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