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Assessing the Effect of Exchange Rate Channel on Household Consumption in the West African Monetary Zone (WAMZ)

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ABSTRACT

The effect of monetary transmission through the exchange rate channel on household consumption in the West African Monetary Zone (WAMZ) had been sparsely explored despite its role in stimulating aggregate demand in many developed countries. Based on this discovery from the literature reviewed, the study estimated the impact of exchange rate channel on household consumption in the WAMZ from 1986 to 2024. The unit root results supported the application of the panel autoregressive distributed lags model for regression analysis. The results revealed that in the short-run, all exchange rate variables have no significant impact on household consumption in the zone. In the long-run, except for inflation rate which significantly affected the household consumption expenditure in the Zone nominal exchange rate and trade balance have no significant effect. Therefore, the study concluded that the exchange rate channel through inflation rate has significant effect on household consumption expenditure in the WAMZ. Based on the findings, some policy implications were highlighted for monetary policy guide in the Zone. The study expanded the scope of literature on how consumption is influenced by exchange rate channel in developing countries particularly in the WAMZ for policy direction in the zone

INTRODUCTION

Household consumption expenditure is the most essential part of aggregate demand. In the West African Monetary Zone (WAMZ hereafter) countries, household consumption is a large proportion in the region of 60% of gross domestic product (GDP) as evident by data from the United Nations Conference on Trade and Development, (UNCTD, 2020). It is an important variable that primarily drives aggregate economic activities as it contributes substantially to aggregate demand (Iheonu & Tochukwu, 2020). The fundamental theories of consumption have it that household consumption which defines individual standard of living can be met through personal income. However, in a small open economy, the purchasing power of income may be affected by imported inflation such as the WAMZ that majorly depends on importation to argument the available goods and services for local consumption. Thus, to improve people's standard of living, the domestic economies of the WAMZ rely on local consumption of imported products and raw materials. As a result, consumption is affected by exchange rate through domestic prices of foreign goods and services due to persistent fluctuations in the value of local currency (Oni & Akinsanya, 2026). The obvious relevance of consumption to economic growth potential of the WAMZ and the need to estimate how exchange rate affects consumption growth is the major motive for the study. In other to examine the influence of changes in exchange rate on household consumption in the WAMZ comprising of Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone, the main aim of the study is to assess how household consumption responds to exchange rate channel in the zone. The specific objective

is to ascertain the short-run and long-run effects of the exchange rate channel on household consumption in the zone. With the apparent importance of consumption in the economic performance of the WAMZ, inducing its growth through policy decision is essential for economic growth, domestic price stability, enhanced employment opportunity and achieving a favorable balance of payment. Though, monetary policy exerts influence on macroeconomic fundamentals through other monetary transmission routes such as interest rate channel, credit channel, equity prices channel and inflation expectation channel (Mishkin, 1996). But exchange rate channel is an important route of monetary transmission since WAMZ is an open economy that trades in consumer goods and services in global markets. Thus, exchange rate is a tool of measuring the values of goods and services. As a result, changes in the value of currency such as naira or cedi will have an effect on the cost of consumable goods and services such as food (Eniekezimene, Wodu & Anda-Owei, 2024). This has implication for household consumption through domestic prices. In spite of the importance of exchange rate channel, its effect through the nominal exchange rate, trade balance as well as inflation on household consumption has not been given the deserving research attention in the zone. In other words, studies on how nominal exchange rate, trade balance and inflation affect consumption have not been adequately investigated in the Zone. Some of the studies that previously investigated the impact of exchange rate on consumption include: Alexander (1952), Bahmani-Oskooee *et al.* (2015), Oseni (2016), Pavlidis *et al.* (2017), Ho and Njindan (2017), Muhammad *et al.* (2019), Paulangahar and Orjime (2020), Babangida *et al.* (2021), Derindag *et al.*

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(2022) and Uche *et al.* (2023). Given consumption as a key component of economic growth, the research attention on its response to changes in exchange rate particularly in developing countries is considered inadequate. As a result, it is essential to expand the scope of literature on how consumption is influenced by exchange rate channel in the WAMZ for policy direction in the zone. Thus, to fill the gap in literature, this study investigated the effect of exchange rate channel on household consumption in the WAMZ from 1986 to 2024. The remaining part of the paper is organized thus: the literature review is presented in section two while section three explains the methodology. The results and discussion are presented in section four while section five concluded and made policy recommendations.

LITERATURE REVIEW

The theoretical approach to the linkage between consumption and exchange rate was derived from some modifications to the Keynesian disposable income and the Classical interest rate model of consumption determination. The traditional theories of consumption present disposable income in absolute income hypothesis (Keynes, 1936) and interest rate on borrowing in inter-temporal consumption hypothesis (Fisher, 1930) as determinants of consumption in a closed economy system. Mundell-Fleming (1963) extended the traditional Keynesian IS-LM model to an open economy system by subscribing to the effectiveness of monetary policy in influencing aggregate demand through the exchange rate. While, Alexander (1952) went further to establish a theoretical linkage between exchange rate and consumption component of the aggregate demand. Alexander (1952) describes the role of the exchange rate in influencing domestic consumption in an open economy through the inflationary effect of currency depreciation. Alexander (1952) stresses that inability of wages to fully adjust to inflation will cause an increase in wages to fall below a level capable of neutralizing the inflationary effect of domestic currency depreciation. This will result to a real value decrease in income adversely affecting domestic consumption. Thus, exchange rate in addition to income and interest rate becomes another important determinant of consumption in an economy. A linkage between exchange rate and consumption affirms a position that consumption in the WAMZ cannot be substantially influenced by internal economic variables such as household disposable income or financing through borrowing alone without recourse to the role of external sector particularly as an open small import-dependent economy. The study by Alexander (1952) was among the earliest empirical attempt to analyse the effect of exchange rate on consumption. He stressed that the exchange rate may have an influence on consumption through its pass-through impact on inflation. Alexander (1952) argued that the uncertainty of exchange rate may instigate inflation uncertainty and in turn determine the household's decision to spend. Following the view of Alexander (1952), more attention was drawn to the

influence of exchange rate on consumer spending behavior. This study reviewed some recent studies on this phenomenon. For example, in a study, Bahmani-Oskooee *et al.* (2015) examined the relationship between exchange rate volatility and domestic consumption in selected emerging economies. The study seeks to determine the effect of exchange rate volatility on consumption. The authors were motivated by the presumed effect of exchange rate volatility on consumption through its direct effect on inflation uncertainty. Unlike the previous studies that employed data from developed economies to affirm a linkage between exchange rate volatility and consumption, the study used data from emerging economies to establish a similar result. Using data from 12 emerging economies, the study found a short run effect of exchange rate volatility on consumption in most of the selected countries, while only half of the countries exhibit a short-run adjustment to the long run equilibrium. The authors concluded that the study has a strong implication for economic growth and business cycles in emerging economies. Exchange rate volatility and consumption behavior were other phenomena examined by Oseni (2016) in a cross-country study that established a negative impact of exchange rate volatility on consumption in Sub-Saharan African countries in a study of how private consumption was affected by volatility in currency rate during the period 1999 to 2014. In modeling exchange rate volatility, the study adopted the System-GMM and GARCH approach. The outcome from the System-GMM analysis indicated an unfavourable impact of exchange rate uncertainty on private consumption in the sub-Saharan African countries. The study thus concluded that unstable exchange rate exerts a noticeable adverse effect on private consumption in the countries. Another cross-country study by Pavlidis *et al.* (2017) investigated the relationship between the real exchange rate and consumption in 14 OECD countries using varying time periods. The authors allowed for a smooth transition by extending the sample period to prevent limitations imposed by linear modeling, and they also account for exchange rate uncertainty. The finding showed evidence of varying correlations among the study variables. The study also revealed the existence of long run relationship between real exchange rate and consumption which was consistent with theoretical postulate. Another study that used a flexible dynamic panel data model by Ho and Njindan (2017) also found an evidence of long-run significant and short-run insignificant effects of exchange rate uncertainty on consumption in selected Asian countries. The technique used allows homogeneous long-run effect to be separated from heterogeneous short-run effect of exchange rate on consumption. The study concluded that in the long-run consumption responded significantly to exchange rate uncertainty while it responded passively in the short-run. Another study by Muhammad *et al.* (2019) aims at determining the volatility effects of exchange rate on household consumption of developed, emerging and developing countries. The author used panel data spanning 1995 to 2017. A panel estimation method was chosen

based on Brush-Pagan & Hausman Tests for each set of selected countries. The results show that exchange rate volatility substantially affected household consumption in developed economies. This result was consistent with Alexander (1952) position that exchange rate is an important determinant of household consumption. The results however indicated that exchange rate volatility has no active effect on household consumption in emerging and developing economies. The evidence from this study for emerging economies deviated from the previous study by Bahmani-Oskooee *et al.* (2015) that established the effectiveness of exchange rate volatility on consumption. Paulangahar and Orjime (2020) examined the short-run and long-run effects of exchange rate on aggregate consumption in Nigeria using Vector error correction model (VECM) to determine the short-run effect while Johansen co-integration test was used to analysis the long-run impact of exchange rate on consumption. The result showed a positive influence of exchange rate on aggregate consumption in both short-run and long-run. The effect was not significant in the short-run but was significant in the long-run. The study concluded that exchange rate is a good determinant of consumption in Nigeria in the long-run than in the short-run. The study therefore recommended that government and policy makers in Nigeria should focus on stabilizing exchange rate and reduce its fluctuations in order to boost aggregate consumption spending. Contrary to this study a study by Babangida *et al.* (2021) found a negative effect of exchange rate on aggregate consumption in Nigeria. The authors evaluated the relationship between the real exchange rate and domestic consumption in Nigeria from 1981 Q1 to 2019 Q4. The authors adopted the Smooth Transition Autoregressive (STAR) model. The study found that domestic consumption was a determinant of regime shift in real exchange rate. It was observed that the lagged exchange rate has a significant effect on the current exchange rate. The study concluded that the relationship between the real exchange rate and domestic consumption was found to be negative. Thus, the fiscal and monetary authorities should adopt policy measures to stimulate domestic consumption below the threshold level required for maintaining a stable exchange rate in Nigeria. Derindag *et al.* (2022) examined the effect of exchange rate on household consumption in BRICSTS countries. The study used multiple asymmetric threshold non-linear autoregressive distributed lag (MATNARDL) model. The aim of the study was to analyze the impact of minor and major currency appreciation and depreciation on household consumption expenditures. The results showed evidence of long-run asymmetric effect of exchange rate on consumption in all the selected countries except India while in the short-run, all countries showed evidence of asymmetric effect except for Turkey. The study concluded that exchange rate has asymmetric effects on consumption both in the long-run and short-run in BRICSTS countries. Uche *et al.* (2023) in another study that also employed multiple asymmetric

threshold non-linear autoregressive distributed lag model re-examined the response of household consumption to minor and major changes in exchange rate in African emerging economies (AEE). The estimation technique adopted captures the distinctive effects of minor and major positive and negative effects of exchange rate on household consumption. The results showed the asymmetric effects of changes in exchange rate on consumption in all countries except for Nigeria. The result further revealed that consumption in Algeria, Egypt and Morocco responded more significantly to major positive shocks in exchange rate. However, consumption expenditures are irresponsive to exchange rate variations in Kenya, Nigeria and South Africa. This is because the household in these countries retained their level of consumption no matter the direction of degree of changes in exchange rate.

MATERIALS AND METHODS

Theoretical Framework

The theoretical framework for this study is anchored on the work of Alexander (1952). Alexander (1952) extended the Keynes (1936) absolute income hypothesis and Fisher (1930) inter-temporal consumption hypothesis to an open economy. He stated that the exchange rate in addition to income and interest rate, becomes another important determinant of consumption in an open economy system. Thus, the study relies on Alexander's (1952) postulation by expressing consumption as a function of exchange rate in an open economy such as the WAMZ

Thus, consumption is expressed as a function of exchange rate given in (3.1)

$$C = f(ex) \quad (3.1)$$

Where C is consumption and ex is the nominal exchange rate. The relationship between consumption and exchange rate can be expressed as follows after including the autonomous consumption coefficient in (3.2)

$$C = \alpha + \delta ex + \mu t \quad (3.2)$$

Where C is consumption, α is autonomous consumption; ex is the nominal exchange rate, δ is the coefficient that captures the effect of exchange rate on household consumption; μ is error term that is white noise and t is time series component of the error term.

Empirical Model

Based on the theoretical postulations of Alexander (1952) the empirical model for the study is expressed in equation (3.3) as follows;

$$HHC_{it} = f(EXR_{it}) \quad (3.3)$$

Equation (3.3) specifies the household consumption (HHC_{it}) as a function of the exchange rate channel (EXR_{it}). Where;

$$EXR_{it} = NEXR, TB, INFR \quad (3.4)$$

Making equations (3.4) as a function of equation (3.3) gives;

$$HHC_{it} = f(NEXR, TB, INFR) \quad (3.5)$$

In econometrics forms, equation (3.5) becomes;

$$HHC_{it} = \alpha_0 + \beta_1 NEXR_{it} + \beta_2 TB_{it} + \beta_3 INFR + \mu_{it} \quad (3.6)$$

Equation (3.6) captures the transmission effect of nominal exchange rate channel on household consumption in the WAMZ. A model with four variables was specified to represent the transmission effect of exchange rate channel on household consumption, which is based on Alexander's (1952) work, in order to study how the exchange rate channel affects household consumption (HHC) in the WAMZ. Nominal exchange rate (NEXR), trade balance (TB) and inflation rate (INFR) were taken into account as variables affecting household consumption (HHC) in order to explore the exchange rate channel. Thus, a Panel Autoregressive Distributed Lag (PARDL) which consists of 6 countries and 36 observations per country is given in compact form stated as following;

$$Y_{it} = \mu_{it} + \theta(L) Y_{it} + \varepsilon_{it} \quad (3.7)$$

Where; Y_{it} presents the endogenous variables matrix; μ_{it} represents the time-invariant country effects vector; $\theta(L)$ presents a "matrix polynomial in the lag operator" L ; ε_{it} denotes variable of error terms; i and t are countries and Time respectively. From equation (3.6), we have

$$HHC_{it} = \alpha_0 + \beta_1 NEXR_{it} + \beta_2 TB_{it} + \beta_3 INFR_{it} + \mu_{it}$$

The PARDL model specification for the research objective becomes;

Thus, equation (3.9) and (3.10) respectively are estimated

$$\Delta \ln HHC_{it} = \alpha_2 + \sum_{i=1}^p \beta_1 \Delta \ln HHC_{t-1} + \sum_{i=1}^p \alpha_{2,i} \Delta \ln NEXR_{t-1} + \sum_{i=1}^p \theta_3 \Delta \ln TB_{t-1} + \sum_{i=1}^p \theta_4 \Delta \ln INFR_{t-1} + \omega_1 \ln HHC_{t-1} + \omega_2 \ln NEXR_{t-1} + \omega_3 \ln TB_{t-1} + \omega_4 \ln INFR_{t-1} + \varepsilon_t \quad (3.8)$$

coefficients expressed in following;

The coefficients of the level variables at p – optimal lag

$$\ln HHC_t = \alpha_2 + \sum_{i=1}^p \beta_1 \Delta \ln HHC_{t-1} + \sum_{i=1}^p \alpha_{2,i} \Delta \ln NEXR_{t-1} + \sum_{i=1}^p \theta_3 \Delta \ln TB_{t-1} + \sum_{i=1}^p \theta_4 \Delta \ln INFR_{t-1} + \varepsilon_{1t} \quad (3.9)$$

is given in the long-run by Equation (3.9). This presents the effect of exchange rate channel (NEXR, TB, INFR) on household consumption at level up to p in the long-run. Further, equation (3.34) depicts ECM showing its

$$\Delta \ln HHC_t = \alpha_2 + \sum_{i=1}^p \beta_1 \Delta \ln HHC_{t-1} + \sum_{i=1}^p \alpha_{2,i} \Delta \ln NEXR_{t-1} + \sum_{i=1}^p \theta_3 \Delta \ln TB_{t-1} + \sum_{i=1}^p \theta_4 \Delta \ln INFR_{t-1} + \lambda ECM_{t-1} + \varepsilon_{1t} \quad (3.10)$$

speeds of recovering from deviation and it can be written as follows

$$ECM_t = \ln HHC_t - \alpha_2 - \sum_{i=1}^p \beta_1 \ln HHC_{t-1} - \sum_{i=1}^p \alpha_{2,i} \ln NEXR_{t-1} - \sum_{i=1}^p \theta_3 \ln TB_{t-1} - \sum_{i=1}^p \theta_4 \ln INFR_{t-1} \quad (3.11)$$

Data and Sources

The annual panel data for the period 1986 to 2024 for all countries in the WAMZ consisting of Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone were used. Data were obtained from the United Nations Conference on Trade and Development (UNCTAD) and the World Bank's Development Indicators (WDI) databases. The explained variable is the household consumption (HHC) measured by annual household consumption expenditure as a percentage of GDP. The explanatory variables are; the nominal exchange rate (NEXR) measured by the official exchange value of local currency; trade balance (TB) measured by net export and inflation rate (INFR) measured by annual consumer price index. The choice of the nominal exchange rate against the real exchange rate was due to its immediate effect on the households' decision to consume foreign products as local currencies of the WAMZ countries vary in values. Trade balance which measures the difference between export and import was included due to proxy for the effect of changes in net export on households' consumption decision as the values of domestic currencies of the WAMZ in relation to foreign currency changes. Inflation rate was included as a model variable to measure how changes in domestic prices resulting from currency depreciation or appreciation affect the households' consumption decisions in the WAMZ. The theoretical postulations for the study variables expect the slopes of nominal exchange rate to be negative, trade balance to be positive and the slope of inflation rate to be negative

$$\frac{\partial HHC}{\partial NEXR} < 0, \frac{\partial HHC}{\partial TB} > 0, \frac{\partial HHC}{\partial INFR} < 0$$

RESULTS AND DISCUSSION

Panel Unit root Results

Panel Unit root tests' results

Table1: Results of Panel Unit root tests

Null Hypothesis: Panel data have unit root (Assume common unit root process)

Series	Level		First Difference		Remarks
	Statistics	P –Values	Statistics	P –Values	
LHHC	-23.7394	0.000*	NA	NA	I(0)
LNEXR	-6.28241	0.000*	NA	NA	I(0)
LTB	14.2716	0.28	118.697	0.000*	I(1)
LINFR	-3.92822	0.000*	NA	NA	I(0)

Source: Authors (2025)

{ *} Indicates 1% level of significance

Table 1: depicts the results of panel unit root tests based on Levin, Lin, and Chu. The results showed that, LHHC, LNEXR and LINFR were stationary at level with probability values less than 1% level of significance. In

contrast, the result of the unit root test for LTB indicates that the variable was not stationary at level but at first difference with probability value less than 1% level of significance. Thus, LHHC, LNEXR and LINFR were

integrated with order I (0) while LTB was integrated with order I (1). Thus, since the model variables were integrated of order zero, one and none was integrated of order two. That is, as none of the variables was stationary at second difference I (2), the series was adaptable to the panel autoregressive distributed lags (PARDL) estimation approach.

Regression Results

Effect of Exchange Rate Channel on Household Consumption in the WAMZ

The panel unit root results revealed that the model variables were stationery at level and at first difference while none was stationery at second difference. As a result, the study employed the Panel Autoregressive

Table 2.Panel (ARDL) Short-Run and Long-Run Estimates

Short-Run Equation				
Dependent: HHC				
Variable	Coefficients	Standard Error	t-stat	p-Value
COINTEQ01	-0.090593	0.057408	-1.578035	0.05**
D(LNEXR)	0.050905	0.106311	0.478829	0.63
D(LTB)	0.012871	0.018989	0.677804	0.49
D(LINFR)	-0.113582	0.064813	-1.752450	0.08
Long-Run Equation				
LNEXR	0.081047	0.070956	1.142213	0.26
LTB	0.008948	0.110674	0.080847	0.94
LINFR	1.633560	0.253764	6.437313	0.000*

Source: Authors (2025)

{*} indicates 1% level of significance

Distributed Lags (PARDL) model in assessing the research hypothesis. The panel autoregressive distributed lags (PARDL) findings for the long-run, short-run and error correction model (ECM) outputs are in Table 2:

In Table 4.2, the short-run coefficient for the nominal exchange rate (NEXR) is (0.050905). This indicates that for every percentage point increase in the nominal exchange rate (NEXR), household consumption (HHC) in the WAMZ will rise by 0.05 percentage points. This result contravenes the theoretical proposition that consumption is expected to decline with a rise in nominal exchange rate. Further, trade balance (TB) with a coefficient of (0.012871) indicates that a percentage rise in trade balance (TB) will generate an increase of household consumption to 0.01 percentage points. This outcome is consistent with the theory as consumption is predicted to rise with a higher trade balance (TB). In addition, inflation rate (INFR) which has a coefficient of (-0.113582) indicates that a decrease of -0.11 percentage points in household consumption results from a percentage higher in inflation. This result is in consonant with theoretical postulation as consumption is expected to fall as inflation rises in the economy. Meanwhile, the p-value associated with nominal exchange rate (p-value: 0.63), trade balance (p-value: 0.49) and inflation rate (p-value: 0.08) at 1% and 5% level of significance show that the coefficients of nominal exchange rate, trade balance and inflation rate are not significant in the short run. The short-run results affirm that exchange rate channel does not affect the household consumption in the WAMZ. The next paragraph discusses the main details of the long-run results. The long-run results

showed that exchange rate channel affects the household consumption in the WAMZ as follows: nominal rate (NEXR) coefficient, as shown in Table 4.2, is 0.081047. This indicates that a per cent increase in the nominal exchange rate will result in 0.08 percentage point increase in household consumption (HHC) in the WAMZ. This finding contradicts the theory which asserts that consumer spending will decline as currency depreciates. The inference of the result is that in import-dependent economies where local production is grossly inadequate to meet local demand, households would rely on foreign products at any currency rate to sustain a given standard of living. In respect of trade balance (TB), in the long-run, the results suggest a coefficient value of 0.008948, meaning that a percentage increase in trade balance (TB) will cause household consumption in the zone to rise by 0.01 percentage points. The result of the trade balance conforms to theory. This is because as trade balance (TB) rises household will increase consumption. Finally, in the long-run inflation rate (INFR) has a coefficient value of 1.633560, meaning that for a percentage increase in inflation rate, the member countries' household consumption (HHC) will rise by 1.63 percentage points. This contradicts the theoretical proposition that increase in inflation rate will raise the price level and discourage household consumption spending as less will be bought at higher prices. Thus, the coefficients of nominal exchange rate (p-value: 0.26) and trade balance (p-value: 0.94) are positive but not significant while the coefficient of inflation rate (p-value: 0.000) is positive and significant. The obvious reasons why exchange rate channel does not affect consumption in the WAMZ in both short-run and long-run may be due to some factors such as

the difficulty of households to get local substitutes for imported goods and services as foreign products are becoming more expensive in domestic market with exchange rate depreciation. Also, the households' preferences for foreign goods and services over the home made products in the local economy probably due to perceived superiority in qualities could be another factor. Third, the households' high taste for foreign products due to the tendency for ostentatious living may constitute another factor. Meanwhile, the results suggest that the long-run outcome affirms that inflation rate significantly affected household consumption. This may be due to the fact that in the long-run, currency depreciation has more impact on household consumption due to inflation which impacts the households' consumption expenditure through the households' real income. Thus, the short-run effect of exchange rate was not significant while in the long-run exchange rate expresses its impact on household consumption through consumer prices (inflation). The error correction coefficient (COINTEQ01 = -0.090593)

falls between the typical range of 0 and 1 and exhibit the predicted negative sign. The speed of adjustment, which is precisely -0.09, indicates that around 9% of the disequilibrium in the model is corrected in a year. In the event of any disequilibrium, it takes an average of 11 years before equilibrium condition is achieved in the zone. This takes a considerable period of time for the zone to return to a stable condition in cases of any disequilibrium.

Diagnostics Wald Tests Result

Table 4.3 contains the Wald Test diagnostic result of the coefficients of the explanatory variables for the PARDL technique used for analysis. Wald test determines whether or not an estimated coefficient in a model is significant. It is also computed to check if the coefficients have shared significance. The results on Table 4.3 implies that the null hypothesis of zero coefficients is rejected (not significant) in favour of the alternative hypothesis at one per cent level of significance.

Table 4.3 Results of Wald Test

Test Statistic	Value	D.f	Prob
F-Statistic	4818.621	(3, 213)	0.000*
Chi-square	14455.86	3	0.000*

Source: Author (2025)

{*} 1% level of significance

The estimated joint coefficients for the nominal exchange rate (NEXR), trade balance (TB) and inflation rate (INFR) are not zero and are significant in the given model at a 1% level of significance; as a result the null hypothesis was rejected while the alternative hypothesis was accepted.

Discussion of Findings

This section highlights the finding of this study in connection to previous empirical findings from the literature. This study's primary objective was to assess the impact of exchange rate channel on household consumption in the WAMZ. The proxies for exchange rate channel are the nominal exchange (NEXR), trade balance (TB) and inflation rate (INFR). The Panel Autoregressive Distributed Lags (PARDL) estimation method was used because the study variables were integrated at I(0) and I(1) and non at I(2). The study found that exchange rate channel does not affect household consumption in the short-run but in the long-run household consumption was significantly affected through inflation. The findings on exchange rate and consumption in the short-run validate the findings of earlier researches conducted by Ho and Njindan (2017) in support of the short-run passiveness of exchange rate on consumption in selected Asian countries while Derindag *et al.* (2022) also found a short-run insignificant response of exchange rate to consumption in the BRICSTS countries. They discovered that consumption expenditure was irresponsive to exchange rate variations in Kenya, Nigeria and South

Africa in short-run and long-run. This is because the household in these countries retained their level of consumption no matter the direction or degree of changes in exchange rate. In contrary, Bahmani-Oskooee *et al.* (2015) using data from 12 emerging economies found a short run effect of exchange rate volatility on consumption in most of the selected countries while only half of the countries exhibit a short run adjustment to the long run equilibrium. Further, the long-run effect of exchange rate on household consumption through inflation was validated by Alexander (1952) in a study where it was observed that the uncertainty of exchange rate may instigate inflation uncertainty and in turn determine the household's decision to spend.

CONCLUSION

The study used the Panel Autoregressive Distributed Lags (PARDL) econometrics technique to analyze the transmission effect of exchange rate channel on household consumption in the West African Monetary Zone. The findings of the study are that all the model variables have no major effects on household consumption in the short-run. In the long-run, except for inflation rate which significantly affected the household consumption expenditure in the Zone nominal exchange rate and trade balance have no significant effect. The basic findings of the study are as follows: In the short-run, there is no significant short-term impact of exchange rate channel on household expenditure in the WAMZ. But in the

long-run, exchange rate channel significantly affected household consumption spending in the WAMZ through the inflation rate. Analysis of speed of adjustment for any divergence also revealed that, 9 per cent of any disequilibrium due to exchange rate variation is corrected within one year in the Zone. This implies that exchange rate channel requires about 11 years to adjust from any departure to equilibrium, moving from short-run to long-run equilibrium. The study concluded that exchange rate channel has no significant effect on household consumption in both the short-run and long-run in the WAMZ. The policy implications of our findings for the countries in the WAMZ are as follows: Evidence from the study suggests that the nominal exchange rate and trade balance are not significant in both the short-run and long-run. Further, inflation was not significant in the short-run but significant in the long-run. This infers that the monetary authorities in the WAMZ should avoid adjusting the exchange rate policy that influences the nominal exchange rate and trade balance as instruments of monetary policy as this does not in any way affect the households' consumption decisions in the zone. Also, the governments and monetary authorities should embark on strategies to stabilize exchange rate in order to control the effect of imported inflation in the zone.

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