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The Demand for Local Currency Real Money Balances in Zimbabwe: An Error Correction Model

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Abstract:

The study seeks to investigate the local currency real money demand function for Zimbabwe for the Multicurrency ZWL period (2019 – 2024) following the re-introduction of the local currency in 2019. The objective is to establish both the long run steady state and the short run adjustment dynamics. Understanding the real money demand function is a prerequisite for optimal monetary policy formulation and implementation. The study applied the Error Correction Model (ECM) methodology to investigate the money demand function using monthly data from 2019:1 – 2024:1. The study findings confirm a stable long run local currency real money demand function which is subject to short run adjustment dynamics. The study findings show that price level shocks on real money demand. Price level shocks lead to elevated real money demand response to short run price level shocks, slow adjustment process and persistence. The real money demand responds positively to real GDP (Scale factor) and inversely related to price level shocks. Short term dynamics (particularly inflation expectations) compound real money demand collapse in response to rising inflation. The study unique contribution is through characterising the impact of price level shocks on the real money demand function and how the pass through effects cascade progressively overtime.

Keywords:

Real Money Demand, Short Run Adjustment Dynamics, Autoregressive Distributed Lag, Error Correction Model

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Introduction

Effective monetary policy formulation and implementation requires Monetary Authorities to have a clear understanding of the determinants of the demand for real money balances and how this is related to economic activity, aggregate demand and price formation. In a Multicurrency environment as currently obtaining in Zimbabwe, enhancing monetary policy effectiveness implies the need to understand the evolution of the local currency real money demand, in the context of the Multicurrency.

Since independence real money demand studies for Zimbabwe have mostly confirmed a stable long run money demand function in which real money demand is positively related to real GDP and inversely related to opportunity cost variables (e.g. inflation, interest rate).

Over the past few decades, Zimbabwe experienced elevated macroeconomic instability including hyperinflation in 2007/8. The hyperinflation wiped out all monetary balances, pensions and nominal wages. The migration to multicurrency accelerated sharply in the second half of 2008, with the public rejecting the local currency. Post hyperinflation, the country adopted multicurrency in January 2009, following the demise of the local currency.

Nearly two decades since the hyperinflation, the public retains elevated local currency distrust, worsened by the central bank credibility deficit. The local currency was initially introduced in 2016 (as Bond notes) and eventually the RTGS dollar was introduced in 2019.

In April 2024, Authorities introduced the local currency, Zimbabwe Gold (ZIG), backed by gold and foreign currency reserves. The public mistrust initially appeared to have dissipated – the public tended to keep ZiG balances in their accounts for longer periods (particularly from April – June 2024). However, this changed dramatically from July 2024 when the parallel market drift led to the local currency depreciation from ZiG13.56/US dollar to ZiG24.5/US dollar in September 2024.

Literature Review

The demand for money function has been the subject of extensive empirical studies, particularly reflecting the central role of money demand analysis in the formulation and implementation of monetary policy for inflation control, seigniorage, and other important macroeconomic policy considerations. Extensive research has been done to ascertain real money demand stability as necessary to enhance policy effectiveness.

Money demand theory originated from the Keynesian Liquidity preference theory of holding money and the contributions from the monetarists such as Milton Friedman (1956). Additionally, the inventory theory also contributed to the extensions of the Keynesian Liquidity preference theory of holding money (Nyong, 2014).

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Keynes Liquidity preference theory postulates that there are three motives for holding real money balances: transaction demand for money, the precautionary and speculative demand for money. The transaction demand for money relates to the amount of money required to sustain transactions while the precautionary demand for money relates to the amount of money required for unforeseen circumstances. The speculative demand for money is the holding of money balances for speculation based on future inflation and interest rates.

Several authors (Baumol, 1952; Tobin, 1956; Friedman, 1956) contributed to the theoretical literature by outlining distinctions between the transactions demand and the asset motive. Theoretically, real GDP is positively related to the real money demand, while money demand is inversely related to inflation and interest rate.

The theory underpinning monetary policy frameworks has its foundation in the quantity theory of money first postulated by Irving Fisher (1911) and expanded by Milton Friedman in the 1960 - 70s. The theory (or its variants) has been widely tested over the decades by many scholars and widely applied for monetary policy analysis in both developed and developing economies.

The theory commences with the quantity theory of money, which gained from the equation of exchange, credited to Irving Fisher in 911. Fisher describes the quantity theory as the key determining factor of the price level in the economy. According to Fisher, a change in the quantity of money generates an equal change in the price level – this would later evolve as the monetary neutrality theory, which states that monetary growth only affects nominal variables in the economy (prices, nominal exchange rate, nominal wages) with no effect on real variables in the long run. Fisher applied the equation of exchange as follows:

$$MV = PQ \quad (1)$$

Where P is the price level, Q is total quantity of goods and services in the economy that are exchanged for transactions purposes, M is total quantity of money, V is total velocity of money in circulation in the economy.

The quantity theory assumes that; for a given level of quantity of goods and services, if the velocity of money remains stable, then any change in money supply affects the price level. This means that changes in money supply in the economy, overtime, only impact on prices and hence inflation. Implying that controlling money supply implicitly means controlling nominal income (P*Q) and by extension controlling inflation.

By extension, the quantity theory suggests that what matters most to holders of money is the real quantity of goods and services (not the nominal quantity) that they are happy to be in possession of a particular quantity of money at any point in time.

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Milton Friedman described the quantity theory as a money demand function with restricted set of variables assumes a stable money demand function. He made an explicit disaggregation of the quantity theory in terms of nominal quantity of money and real quantity of money.

The nominal quantity of money is based on the units of measurement that is assigned to money for the purchase of a set of goods and services, while the real quantity of money is based on the quantum of goods and services that money can purchase.

Milton Friedman expanded on the Fisher equation of exchange and postulated that the most important version of the quantity theory of money is the transactions component of money holding that was an integral part of the Fisher equation of exchange. This has been augmented by many scholars over time, as the transactions demand for money. The modified form of the equation of exchange has been presented in the following form:

Md = f(PQ) (2), where;

Md is the amount of money households demand as a function the nominal income (PQ).

The fundamental assumption for the above equation of exchange is that interest rate has a negligible influence in the determination of the demand for money. However, Keynes argued that interest rate plays an important role in the demand for real money balances.

The modification by Keynes permeates into the modern money demand function where demand for real money balances is a function of real GDP (scalar variable) and interest rate (as an opportunity cost variable), as below:

$Md = f(Y^{+,} i^{-})$ (3)

The demand for real money balances is positively related to income (real GDP) and negatively related to the interest rate. Extension of equation (3) to represent a small open economy (thus, incorporate international trade of goods and services and capital flows) yields the expanded equation below:

$M/P = \alpha + \beta_1 Y_t + \beta_2 i + \beta_3 infld + \beta_4 nexr + \beta_5 USffr + \mu_t$ (4)

Where:

- M/P is the real demand for money;
- Y_t is real GDP;
- infld is inflation differential between the US and the small open economy;
- nexr is the nominal exchange rate *(expressed as local currency per US dollar);*
- USffr is the US Federal Funds rate;
- $\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are parameter coefficients to be estimated and
- μ_t is a stochastic error term (*serially uncorrelated, independently distributed error term)*

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Selected Empirical Real Money Demand Studies

The stability of the money demand function is an area that has been extensively researched, including in Sub Saharan Africa, particularly because the stability of the money demand is an integral part of the monetary targeting framework for monetary policy formulation.

Makochekanwa (2007) examined the long run cointegrating relationship between demand for real money balances and price level expectations and nominal interest rate.

McIndoe-Calder (2009) applied the Autoregressive distributed lag model (ARDL) to investigate seignorage, aid shocks and the real money demand function for the period from 1980 – 2008. The results confirmed a long run cointegrating relationship between real money demand, real GDP and inflation. The study findings show evidence that sharply escalating inflation and hyperinflation was related to increases in money supply growth.

Table 1 below is a summary of the real money demand studies undertaken for selected small open developing economies:

Name and Year of Study	Country	Methodology	Data Period	Study Findings
1. Kallon (1992)	Sierra Leone	Two Stage Least Squares	1966q1 – 1986q4	Confirmed real money demand stability. Inflation negatively affected while foreign interest rate had no effect on real demand for money
2. Kallon (2022)	Sierra Leone	ARDL Model	2002Q1 – 2018Q4	Confirmed real money demand stability. Financial innovation, real income, inflation rate and exchange rate significantly impact on real money balances
3. Ifeoma et al (2025)	Sub Saharan Africa (SSA)	ARDL Model	1999q1 – 2023q4	Categorised SSA countries into three categories: Upper, middle and lower income) Study findings showed that the real exchange rate,

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Name and Year of Study	Country	Methodology	Data Period	Study Findings
				foreign interest rate and real GDP had significant long run effects on real money demand, while inflation exerted contractionary effects.
4. Mose et al (2024)	Kenya	ARDL Model	2007 - 2020	Findings showed a stable money demand. Further, the results showed that an increase in mobile money led to an increase in real demand for money.
5. Mumba and Ziramba (2021)	Zambia	Gregory Hansen Cointegration Methodology	1978 - 2018	Findings showed a stable real money demand function, with structural break in 1994)
6. Hatekar and Sahoo (2018)	India	ARDL	1996q2 – 2016q3	Study Findings support a long cointegrating relationship
7. Bahmani–Oskooe & Wang (2017)	China	ARDL	2006q1 – 2016q1	Study findings support a stable real money demand function, particularly for M1 (narrow money)
8. Nchor and Adamec (2016)	Ghana	Johansen Cointegration	1991 - 2011	Study findings support a stable money demand function.
9. Zgambo and Chileshe (2014)	Zambia	ARDL	1995q2 – 2013q3	Study findings supported a stable real money demand function. The results also showed inflation affected real money demand only in the short run.

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Name and Year of Study	Country	Methodology	Data Period	Study Findings
10. Kiptui (2014)	Kenya	ARDL	2001q1 – 2013q4	Study findings supported real money demand stability.
11. Kapingura (2014)	South Africa	VECM	1994 - 2012	Study findings supported a stable long run money demand function. The results showed that the money demand function was unstable between 2003 – 2007.
12. Niyimbanira (2013)	South Africa	VECM	1990q1 – 2007q4	Study findings showed a stable long run cointegrating real money demand function. The prime interest rate and real income were the major determinants with income elasticity close to 1.
13.Kumar, Webber and Fargher (2013)	Nigeria	ARDL	1960 - 2008	Estimated both narrow and broad money demand. Study results confirmed real money demand stability, with a structural break in 1986.
13. Lungu et al (2012)	Malawi	ARDL	1985 - 2010	Study findings supported a stable long run relationship between real money balances, prices, income, exchange rate, interest rate and financial innovation
14.Dagher and Kovanen (2011)	Ghana	ARDL	1990q1 – 2009q4	Study findings confirmed real money demand stability. The money demand in Ghana is

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Name and Year of Study	Country	Methodology	Data Period	Study Findings
				subject to both short run dynamics and long run determinants (real GDP, exchange rate)
1. Lestano et al (2011)	Indonesia	ARDL	1980q1 – 2004q4	Study findings support a stable long run cointegrating relationship for narrow money.
2. Boucekkine et al (2021)	Algeria	ARDL	1979 - 2019	Study findings supported a stable long run cointegrating relationship for both narrow and broad money components
3. Omar and Hussein (2020)	South Africa	VECM	2000q1 – 2017q4	Study findings confirmed a stable long run relationship between real money demand, income and the interest rate
4. Chen et al (2020)	China	Panel Data Modelling	1980q1 – 2018q3	Study findings identified a stable long run real money demand function, with a structural break in 1992. Study findings also show strong transaction demand for money while the speculative demand for money was comparatively weaker
5. Dou (2018)	China	SVAR	1996 - 2016	Study findings supported a stable long run real money demand function.

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Name and Year of Study	Country	Methodology	Data Period	Study Findings
6. Epaphra (2017)	Tanzania	VECM	1966 - 2015	Study findings support a long run stable money demand function which has short run dynamics.
7. Beyer (2009)	Euro Zone	VECM	1983q1 – 2006Q4	Study findings established a stable real money demand function with housing wealth as a significant determinant of long run demand for money.
8. Paul et al (2025)	India	VECM	2000q2 – 2024q4	Study findings established a stable long run real money demand function with strong positive wealth effects on narrow money.
9. Adil et al (2024)	India	VECM	1996q1 – 2021Q2	Study findings established a stable long run relationship for both narrow and broad money. The study allowed for multiple structural breaks.
10. Dekkiche (2022)	Egypt	VECM	1990 - 2019	Study findings supported a long run stable money demand function

Table 1: Selected developing countries real money demand studies

Data and Model Specification

Data Sources

The table below shows the data variables and source:

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Variable	Source	Notes
Monetary Aggregates (M3, M1 and M0)	Reserve Bank Monthly	RBZ Weekly Reserve money
Price Level (CPI)	ZIMSTAT	
Parallel Market exchange rate		Regular Internal Tracking of Parallel market

Table 2: Data Sources

Data Analysis and Unit Root Tests

The Log transformation was carried on the variables in levels and first differences.

The Engle Granger Error Correction Model (ECM) is followed in this analysis, allowing for the examination of a long run relationship between money (M0, M1 or Broad money), the exchange rate, prices and hence inflation.

The process entails data collection, data analysis and unit root tests to identify the order of integration of the series. Though individually, the series are a unit root process, the linear combination of the variables is stationary – i.e. variables are jointly trending overtime.

The variables are nonstationary in levels (require first differencing to achieve stationarity).

The variables of interest are:

- LCPI (log of the Price level)
- LM3 (Log of broad money);
- LM1 (Log of narrow money)
- LNPER (Log of the nominal exchange rate rate)
- LGDP (Log of Real GDP)
- LRMD3ZW (Log of ZiG broad money)
- LM3FC (Log of foreign currency broad money)

All the variables were integrated of order 1 (i.e. stationary after first differencing).

Single Step Engle Granger Estimation

The Single Step Engle Granger estimation process combines both the long run and short run dynamics. The short run dynamics characterise how the local currency money demand adjusts to a new long run equilibrium following shocks to the economic system.

The Single Step Estimation process follows the following specification.

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$\Delta LOG(RMD3ZZW) = \alpha + \beta_1 LOG(RMD3ZZW(-1)) + \beta_2 LOG(RM3FC(-1)) + \beta_3 LOG(GDP(-1)) + \beta_4 LOG(CPI(-1)) + \varepsilon_t$

Where: β_1 *is the coefficient of adjustment (must be negative)*

- rmd3zzw is the local currency real money demand (m3zzw/cpi);
- RM3FC is the is real foreign currency explanatory variable;
- GDP is real GDP (scalar variable)
- CPI is the Price level; and
- ε_t is the serially uncorrelated, stochastic error term.

The equation estimation, compilation and simulation using monthly data from January 2019 to March 2024. (62 data points after adjusting endpoints).

Estimated Coefficients

DLOG(RMD3ZZW) = -0.143897190612*LOG(RMD3ZZW(-1))* + *0.0826434242259*LOG(RM3FC(-1)) + 0.428164135876*LOG(GDP(-1))* - *0.0360255853489*LOG(CPI(-1)) - 0.226146986213 - 0.955849682816*DLOG(CPI)* - *0.139307917201*DUM19M9 - 0.137093424801*DUM23M9* - *0.13505257007*DUM20M9 - 0.128697453592*DUM22M10* + ε^*_t

Dependent Variable: DLOG(RMD3ZZW)				
Method: Least Squares				
Date: 02/26/25 Time: 17:43				
Sample (adjusted): 2019M01 2024M02				
Included observations: 62 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
LOG(RMD3ZZW(-1))	**-0.143897**	0.028882	-4.982299	0.0000
LOG(RM3FC(-1))	0.082643	0.017775	4.649356	0.0000
LOG(GDP(-1))	0.428164	0.226162	1.893171	0.0639
LOG(CPI(-1))	-0.036026	0.011252	-3.201795	0.0023
C	-0.226147	0.464970	-0.486369	0.6287
DLOG(CPI)	**-0.955850**	0.087035	-10.98239	0.0000

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Dependent Variable: DLOG(RMD3ZZW)				
DUM19M9	-0.139308	0.051752	-2.691816	0.0095
DUM23M9	-0.137093	0.052558	-2.608421	0.0118
DUM20M9	-0.135053	0.052331	-2.580740	0.0127
DUM22M10	-0.128697	0.051345	-2.506521	0.0154
R-squared	0.782070	Mean dependent var		-0.003226
Adjusted R-squared	0.744351	S.D. dependent var		0.098566
S.E. of regression	0.049837	Akaike info criterion		-3.013443
Sum squared resid	0.129152	Schwarz criterion		-2.670357
Log likelihood	103.4167	Hannan-Quinn criteria.		-2.878739
F-statistic	20.73427	Durbin-Watson stat		1.995614
Prob(F-statistic)	0.000000			

Table 3: Estimated Coefficients of the Single Step Engle Granger Model

The model is a cointegrating error correction model, incorporating both long run real money demand determinants and short run dynamics. The model adjustment coefficient of **-0.143897** shows that following a shock, as much as **14.39%** of the disequilibrium is cleared in one month, showing persistence and slow adjustment.

The demand for real money balances is a function of long run variables and short run dynamics:

Long run variables

- Demand for foreign currency balances;
- Real GDP (Transactions demand)
- Price level (Opportunity cost)

Long run parameters

The long run parameters are derived as below

LOG(RMD3ZZW(-1))	-0.143897	
LOG(RM3FC(-1))	0.082643	**0.57**
LOG(GDP(-1))	0.428164	**2.98**

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LOG(CPI(-1))	-0.036026	**-0.25**

Table 4: Long Run Parameters

In the long run:

- A **1%** increase in foreign currency balances is positively related to and increasing demand for real money balances by **0.57%** (likely through increase in credit creation and real GDP growth).
- A **1%** increase in Real GDP increases demand for real money balances by nearly **3%** (2.98%). This is consistent with theory and observations for other developing economies, such as Kenya, Tanzania or Zambia.
- A 1% increase in the consumer price level (CPI) reduces demand for real money balances by 0.25% in the long run. But there are large and defining short run dynamics which impact significantly on the demand for real money balances.

Short run dynamics

- DLog(CPI) Changes in the price level;
- Some dummy variables.

In the short run, changes in the price level have instant, contemporaneous effects. A 1% increase in the consumer price level (CPI) leads to a ***95.6% decrease*** in demand for real money balances, instantly (almost a 1:1 relationship).

This is significant - in essence collapsing price level expectations is a pre-requisite for stabilising the demand for money function and therefore successful (money supply based) monetary policy and successful de-dollarisation.

In the case for Zimbabwe, the short run price level dynamics are far more deterministic on the money demand function.

Tests for Residual Stationarity

Null Hypothesis: RES0001RMD3ZZW has a unit root				
Exogenous: None				
Lag Length: 0 (Automatic - based on SIC, maxlag=10)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			**-7.876823**	**0.0000**

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Null Hypothesis: RES0001RMD3ZZW has a unit root				
Test critical values:	1% level		-2.603423	
	5% level		**-1.946253**	
	10% level		-1.613346	
*MacKinnon (1996) one-sided p-values.				

Table 5: Tests for Residual Stationarity (Augmented Dickey-Fuller Test)

The residuals of the model are stationary in levels. The residual stationarity tests show that the money demand equation is a cointegrating function which has long run determinants and short run dynamics of adjustment, following a shock.

Error Correction Model Specification and Diagnostic Tests

The Specification and Diagnostic tests are necessary to ensure that the money demand function has no serial correlation, heteroskedasticity and parameter instability challenges.

Histogram and Normality Tests

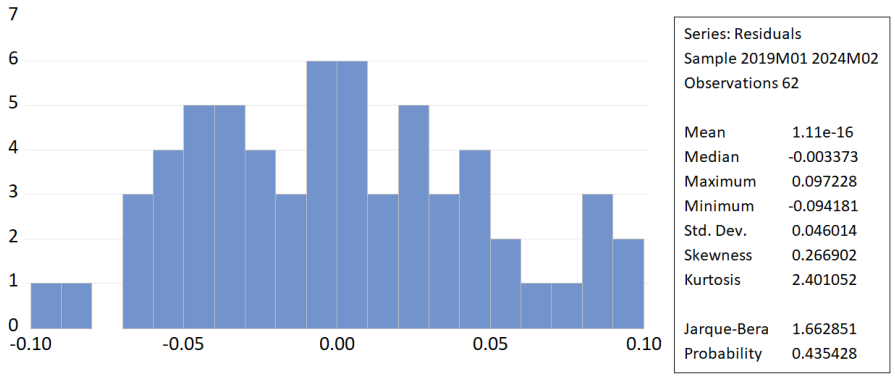


Figure 1: Histogram and Normality Test of the Residuals

Ho: Residuals are normally distributed

H1: Residuals are not normally distributed

The JB Test statistic shows that the residuals are normally distributed.

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Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:
Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.829526	Prob. F(2,50)	0.4422
Obs*R-squared	1.991155	Prob. Chi-Square(2)	0.3695

Figure 2: Breusch-Godfrey Serial Correlation LM Test

Ho: Residuals have no serial correlation

H1: Residuals have serial correlation

The Serial Correlation Test results show that the residuals have no serial correlation

Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey
Null hypothesis: Homoskedasticity

F-statistic	0.444072	Prob. F(9,52)	0.9044
Obs*R-squared	4.425126	Prob. Chi-Square(9)	0.8813
Scaled explained SS	2.180586	Prob. Chi-Square(9)	0.9883

Figure 3: Breusch-Pagan-Godfrey Heteroscedasticity Test

Ho: Residuals have no multiple variances

H1: Residuals have multiple variances

The Breusch – Pagan- Godfrey Test show that the residuals have no heteroscedasticity.

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Stability Test

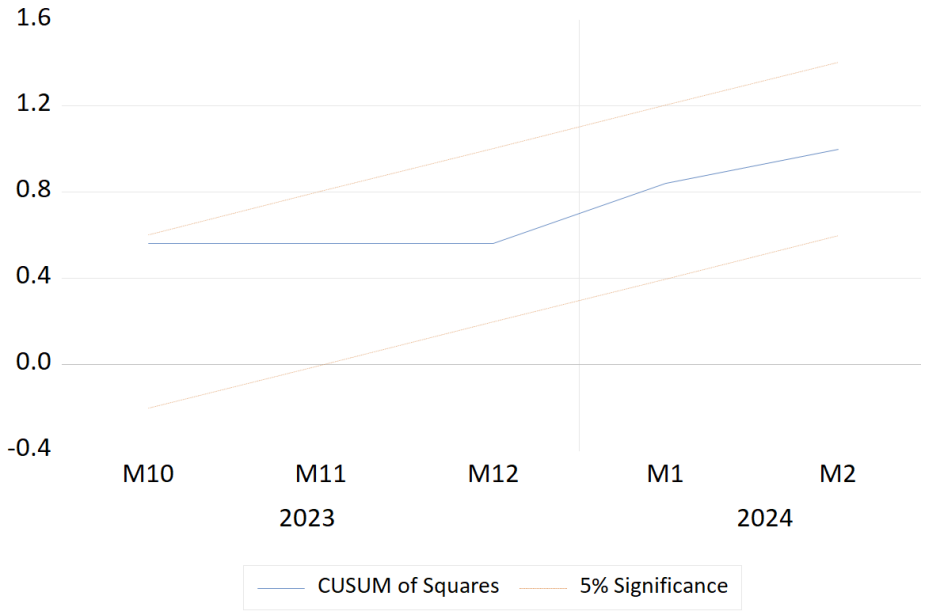


Figure 4: Stability Test (CUSUM of Squares)

Ho: The model is stable;

H1: The model is not stable

The Cusum of Squares shows that the model is stable.

Real money demand shocks propagation and adjustment to the long run

Shocks propagation show how the economy adjusts towards a new equilibrium following a shock to the demand for money function. In reality, the economy is rarely in equilibrium but constantly subjected to shocks (demand and supply shocks) with the later impacting on financial and goods markets equilibrium.

Shocks to the real demand for money function imply temporary departures from long run equilibrium. The real money demand function adjusts to a new ***long run*** equilibrium following a shock. The new equilibrium following a single period 1% increase in the price level shows that real demand for money declining to **-0.25%** after three and half years.

Real money demand declines by **0.95%** immediately, following a 1% price level increase. The impact of price level shocks on money demand are more pronounced in the short run. ***Any increase in the consumer price level, immediately triggers flight from the local currency*.**

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	A 1% shock to the price level	Real Money demand response	
2018m12	0	0	**months**
2019M01	1	-0.9466	1
2019M02	1	-0.84648	2
2019M03	1	-0.7607	3
2019M04	1	-0.68722	4
2019M05	1	-0.62423	5
2019M06	1	-0.5703	6
2019M07	1	-0.5241	7
2019M08	1	-0.48452	8
2019M09	1	-0.45066	9
2019M10	1	-0.42161	10
2019M11	1	-0.39679	11
2019M12	1	-0.37548	12
2020M01	1	-0.35726	13
2020M02	1	-0.34169	14
2020M03	1	-0.32833	15
2020M04	1	-0.31687	16
2020M05	1	-0.30707	17
2020M06	1	-0.29872	18
2020M07	1	-0.29151	19
2020M08	1	-0.28539	20
2020M09	1	-0.28014	21
2020M10	1	-0.27562	22
2020M11	1	-0.27172	23

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	A 1% shock to the price level	**Real Money demand response**	
2020M12	1	-0.26841	24
2021M01	1	-0.26563	25
2021M02	1	-0.26321	26
2021M03	1	-0.26115	27
2021M04	1	-0.25936	28
2021M05	1	-0.25785	29
2021M06	1	-0.25652	30
2021M07	1	-0.25541	31
2021M08	1	-0.25446	32
2021M09	1	-0.25366	33
2021M10	1	-0.25296	34
2021M11	1	-0.25234	35
2021M12	1	-0.25183	36
2022M01	1	-0.25144	37
2022M02	1	-0.25105	38
2022M03	1	-0.25071	39
2022M04	1	-0.25044	40
2022M05	1	-0.25024	41
2022M06	1	**-0.24999**	**42**

Table 6: Price level shocks propagation impact on real money demand

The short run dynamics indicate a very slow adjustment process – a single period price level shock impacts on the money demand function for a period extending **42** months (three and half years). The strong persistence reflects the impact of de-anchored inflation expectations embedded in the economy. *Collapsing inflation expectations is therefore a pre-requisite for normalisation of the money demand function.* The figure below shows the price level shocks impact on real money demand function.

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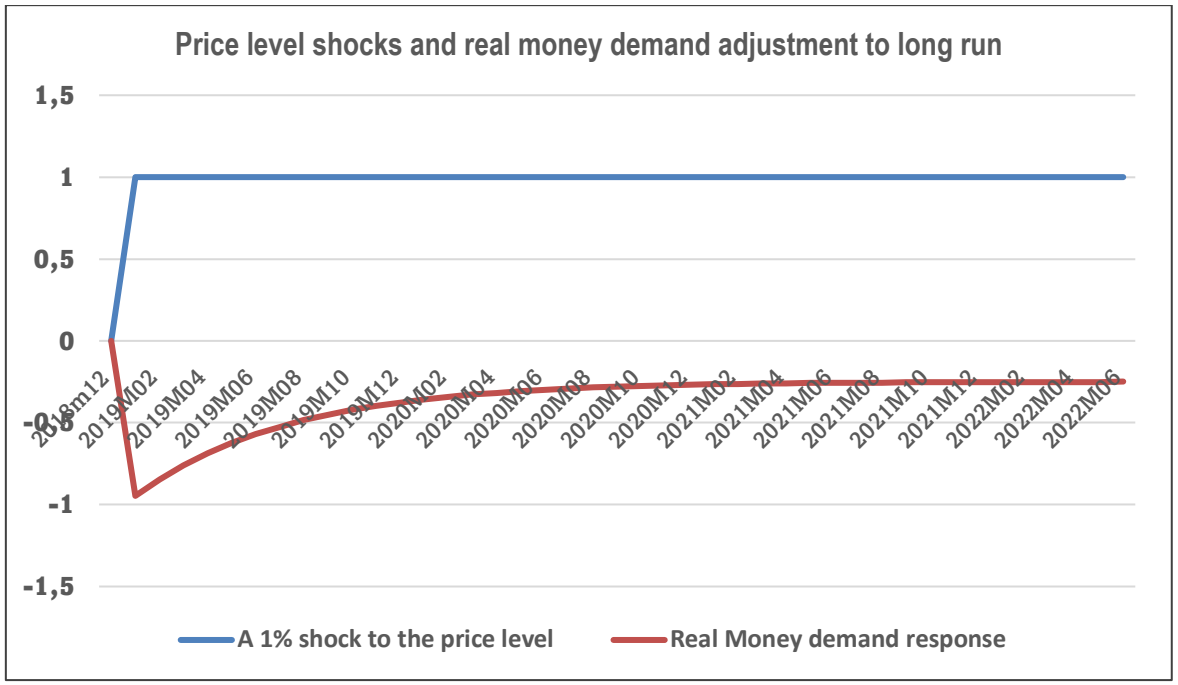


Figure 5: Price level shocks impact on real money demand

Study Findings

The study findings are:

- The demand for real money balances is stable in Zimbabwe (notwithstanding the high and variable inflation). There is a cointegrating long run relationship between real money balances, real GDP and the price level.
- The demand for real money balances is positively related to real GDP growth and inversely related, 1:1 with the price level;
- The demand for real money balances is sensitive to short run price level changes, and the short run dynamics of adjustment are large and show persistence;
- For every 1% increase in the price level, real money demand, decreases by **0.95%** instant, indicating perfect asset substitution in favour of foreign currency.
- The impact of price level shocks on the demand for real money balances is subject to long and distributed lags, reflecting embedded inflation expectations.

Money supply growth, exchange rate and price level dynamics and real money demand

The demand for money in Zimbabwe is a product of multiple interactions across all key markets of the economy, the goods, labour, and financial markets leading to the demand for money function. Ordinarily,

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under normal circumstances, the demand for real money balances is affected by many variables, but in Zimbabwe, the principal factors affecting local currency money demand are the price level changes and inflation expectations.

The asset substitution effect is also very strong in Zimbabwe, leading to elevated flight from the local currency, reflecting ingrained public distrust of the local currency as a store of value. Until the demand for real money balances is normalised, the local currency usage is only transient (for immediate transacting), with minimal recourse as a store of value. This explains why the local currency gaining traction remains intractable.

The economy will ***only*** de-dollarise when the money demand function has normalised (velocity stabilisation). Currently ZiG velocity of circulation is very high, indicating elevated flight from local currency. For this reason, the ZiG volume of transactions increased from 26% in April 2024 to 43% by end of June 2025.

The path to normalisation of the real money demand function requires the following:

- Entrenching low and stable inflation; *which requires;*
- Collapsing inflation expectations; *which requires;*
- Collapsing the parallel market premium; *which requires*;
- A flexible exchange rate and single digit annual money supply growth.

Essentially normalising the real money demand function must consider the nexus between monetary, exchange rate and price level shocks across all the key markets in the economy.

Policy Implications

The optimal path for successful de-dollarisation is to implement a policy matrix (fiscal and monetary policy) that creates conditions for the public to prefer local currency against, foreign currency, particularly the US dollar. Increasing the share of ZiG in broad money (m3) is a prerequisite for successful migration to local monocurrency. The widespread use of ZiG must precede monocurrency adoption, otherwise insufficient financing will exert severe contractionary effects on the economy in the event of a hastily monocurrency.

The share of ZiG in broad money can only be achieved through a fiscal and monetary policy matrix that occasions and sustains ZiG credit growth, at a rate faster than USD credit growth, while maintaining local currency stability. Expanding ZiG credit creation in the economy requires the following monetary policy measures:

- A clear money growth rule and related exchange rate adjustment is necessary to expand ZiG usage in the economy, enhancing the normalisation of the money demand function.
- Reducing ZiG Statutory Reserves;

- Reducing interest rates;
- Reducing the level of foreign currency intervention;
- Reducing NNCDs intervention in liquidity management;
- Sustain single digit annual reserve money and broad money growth over the next decade;
- Accelerate Building Foreign Currency Reserves; and
- Collapsing the parallel market premium to low single digit levels;

The following fiscal policy measures will improve ZiG credit creation in the economy:

- Preferential taxes, such as a proportion of PAYE (say 15%) to be payable in ZiG;
- Removal of IMTT tax for all payments, to promote formalisation of both ZiG and US dollar flows in the economy;
- Promote ZiG Payments across Government departments and quasi government institutions

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