

An Analysis of the Demand for Money Function in Iraq

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Abstract

Developing and executing monetary policy requires an understanding of the stability of monetary aggregates and the variables influencing the demand for money in the economy, given the sensitivity and importance of money in the economy as the fuel of the production process. In this study, the Autoregression Distributed Lag (ARDL) model was used to experimentally estimate the broad money demand function (M2). Using annual data, the GDP, exchange rate (EX), inflation rate (INF), and interest rate (R) for the years 2003–2024 were computed. A long-term cointegration link between (M2) and its determinants was discovered by the investigation. Additionally, the study discovered a favorable short-term correlation between (M2) and GDP and the exchange rate. The CUSUM test findings also demonstrated the stability of the money demand function in the Iraqi economy and the efficacy of using (M2) as a monetary policy criteria.

Keywords: Demand for Money, Autoregression Distributed Lag, Exchange Rate, Interest Rate, GDP, Inflation Rate, M2.

Introduction

The idea of "demand for money" is quite fascinating to many economists. It encompasses a variety of marketplaces, such as the money market, the capital market, the products and services market, and the foreign currency market, in contrast to the demand for commodities and services. It therefore directly affects monetary policy, whose effectiveness depends on the stability of the money demand function. The question of its stability is essential to comprehending the behavior of macroeconomic variables because of the latter's connection to the study of macroeconomics. The behavior of many areas of macroeconomics may be explained and even predicted with the help of stability.

A long time ago, there was a heated intellectual debate among many economic theories regarding a pivotal question: "Why do individuals keep money?" It began with Fisher at the beginning of the twentieth century and then came John Maynard Keynes in the 1930s and passed through the ideas of William Baumol, James Tobin, and Patinkin and reached Milton Friedman in the 1950s. However, Keynes was a pioneer of modern theories of money demand. Keynes showed that the demand for money is for three purposes: speculation, precautionary, and transactions, and every purpose related to a specific demand for money. According to the Keynesian approach, the money demand function is formulated as if there is an amount of money that meets separate needs. There are needs for transactions and financing to carry out or conduct exchanges of goods and services between individuals and companies. Additionally, there are speculative goals and precautionary needs that align, respectively, with the desire to guarantee the possession of future cash balances equal to a specific percentage of total resources and the objective of making profits by comprehending the movement of financial markets.

Baumol contributed in 1953 using a method based on brokerage fees and the interest rate on deposits in the money demand function. In contrast, Friedman thought in 1956 that since wealth is a variable in the money demand function, investors might retain their wealth in stocks, bonds, and liquid cash. Friedman used the permanent income hypothesis, which is a weighted average of present income levels and previous income, in cases where direct wealth measurement is not practical.

The challenges facing the stability of demand for money at the present time are different and renewable, predictable and unpredictable, whether at the local level or in relation to the

external world. The difficulty lies in determining the movement of variables. As a result, control is a difficult process that calls for excellent administration and execution of monetary policy. This policy includes a set of tools and measures to modify monetary relations and make the movement of monetary variables consistent, whether in stabilization, slowdown, or acceleration, in order to be consistent with the phenomenon of money demand and the continuous stability of the money demand function. Among the key components of contemporary monetary policy are its determinants, which include income, interest rates, price levels, and foreign currency markets. Therefore, the skill of controlling the growth or contraction of monetary assets to achieve the degree of monetary equilibrium in the monetary market is known as monetary policy management. This helps achieve monetary stability, particularly given the scarcity of monetary options in developing nations like Iraq, the growing phenomenon of dollarization, currency substitution, real asset speculation, the difference between the nominal and real interest rates, and the weakness of monetary policy and its relationship to financial policy.

1. Theoretical Framework of Demand for Money in the light of Schools of Thought

1.1. Classical School

Analyzing the demand for money, which is essential to figuring out how monetary policy affects different economic activity, has been the subject of numerous schools of thought. This starts with the classical school, which demonstrated that relative prices fluctuate to maintain equilibrium and that all commodity markets are in constant equilibrium. According to Jevons (1875), the use of money satisfies two similar needs, namely to make the exchange of things easier. The amount of money and the level of prices are directly linked, according to the classical quantity theory of money. Two comparable alternative formulations were used to construct this connection within the context of classical equilibrium. Yale University's Irving Fisher is credited with developing the first formula, called the "equation of exchange," while Cambridge University's economists are credited with developing the second, called the "Cambridge Approach or Cash-Balance Approach." Because both formulae focus on money as a medium of exchange, they offer models of the demand for money in transactions. Fisher (1911) focused on the institutional elements of the payment system, whereas economists from

the University of Cambridge focused on the reasons why people possess money. (Sunil Kumar Singh, Jyotish Kumar, 2015).

1.2. Neoclassical School

Neoclassical economists valued money for its ability to control commodities and services and believed that money's primary function was that of a medium of exchange. Because money was traded and moved throughout the economy, its role as a store of value was highlighted, giving it economic significance. The lack of a clear role for interest rates in influencing the demand for money, however, was one of their writing's flaws; instead, they attributed changes in demand to a number of different variables. According to Hicks (1935), conventional value theory should serve as the foundation for the theory of money demand. According to this perspective, the difficulty of selecting between different assets while adhering to the wealth limitation (balance sheet) is what drives the need for money. As a result, it is primarily impacted by the cost of transactions as well as the expectations of returns and dangers associated with these assets (Andreea Paunescu, 2002) .

1.3. The Keynesian School

Keynes treated the problem of money demand from an entirely different analytical perspective and provided a more sophisticated explanation than his predecessors. Keynes studied money from the perspective of "holding it," concentrating on the reasons why people hold money and the ensuing demand for it, whereas classical and neoclassical economists studied the demand for money primarily from the perspective of "moving money"—that is, with no possibility of holding idle balances because all income is spent. Keynes was linked to commercial viewpoints in this sense. Keynes believed that people kept money for three reasons: speculation, transactions, and prudence. However, his most significant addition to the theory of money demand was the role of the speculative incentive. Keynes referred to this speculative desire for funds as a "liquidity preference." One of Marshall and Pigou's early theories—that future uncertainty influences the demand for money—was attempted to be formalized by Keynes. Keynes concentrated on one economic variable—the projected level of interest rates, or more precisely, the expected yield on bonds—instead of talking about uncertainty in general. The formula for the money demand function is now $md = f(y,i)$, where real income (y) and interest

rate (i) determine the demand for real cash balances (md). This is because the interest rate is explicitly included to the money demand function. The basic finding of Keynesian analysis is that, regardless of supply, individuals prefer to store money when interest rates are extremely low because they anticipate future increases. At this point, the overall demand for money becomes quite unpredictable in response to the interest rate. The economy thus experiences the "liquidity trap," where the money demand's elasticity with regard to interest rates may be infinite at low interest rate levels. (Andreea Paunescu, 2001).

1.4. Baumol-Tobin Theory

In contrast to Keynes's research, Baumol and Tobin's (1958) theoretical work on the demand for money for transaction purposes produced more accurate results regarding the factors that affect the money demand function. Because interest rate variations are unclear, people may keep bonds or cash at any one moment. According to them, the investor would profit from economies of scale and make more bond investments as a result of the growth in revenue. They used the assumption that the person gets paid once per period and spends all of his earnings at a certain rate during that time. As a result, the person will own some assets throughout each period, with the exception of the last period during which the final expense is incurred. Every time wealth is moved between assets (money and bonds only), the owner is responsible for paying a brokerage charge. The person's objective is to ascertain the amount of bonds they should hold in order to maximize interest income and minimize brokerage costs (Bonface Munene Mujuri, Lawrence Kibet, 2018).

1.5. Post-Keynesian Theory of the Demand for Money (Sunil Kumar Singh) (Subramanian S. Sriram,1999)

A. Inventory-Theoretical Approach: Using this approach, Tobin (1956) and Bomal (1952) created the theory of demand for money. Money is typically thought of as a stock that is held for transactions. Since income and costs are not in sync, the family portfolio must balance two factors: first, assets produce interest while money does not, and second, money is required to finish transactions. When you sell assets that generate revenue to finance a transaction, the person may have to pay brokerage fees.

- B. The Precautionary Demand Approach to Money:** People's uncertainty about the payments they might need or desire to make leads to the cautious demand for money. In this situation, a person's likelihood of suffering the consequences of liquidity constraints decreases with the amount of money they own. But the more money he retains, the more interest revenue he forfeits. As a result, the person carefully weighs the benefits of preventing liquidity shortages against the interest expense in order to maximize the precautionary cash balance.
- C. The Approach of Considering Money as an Asset:** The Yale school is frequently credited with creating these models, sometimes known as asset models or portfolio models. In this case, the need for money is seen more generally as a component of the issue of allocating wealth among a portfolio of assets that includes cash. Every asset produces both implicit service flow and explicit returns. The predicted risks and returns of assets were the primary focus of the analysis. When it comes to currency, the explicit return encompasses not just liquidity and security but also services like transactional simplicity.
- D. Consumer Demand Theory Approach:** This method analyzes money from the standpoint of consumer theory, which holds that people keep products based on the utility they obtain from them. The Chicago School, which sees the need for money as a direct extension of conventional demand theory for durable commodities, is frequently linked to this method. The concept is to compute monetary aggregates with equal weights for their constituent parts, such as M1, M2, and M3. This process makes the implicit assumption that various non-banking public segments view each component of their monetary aggregates as a perfect substitute.

2. Review of Some Previous Studies

2.1. Study (Imiso Msomi, Sanele Gumed, 2024) (Imiso Msomi¹, Sanele Gumed, 2024)

In order to comprehend the behavior of the money demand function in South Africa, this study evaluated the demand for money and used the CUSUM test to look at the function's stability between 2003 and 2023. According to the report, the demand for money was steady prior to 2015 but has since grown erratic. Impulse response functions show that inflation and interest rate shocks enhance the volatility of money demand. In other words, throughout time, these factors have led to the volatility of the money demand. Based on the empirical findings, this

study suggested that the South African Reserve Bank should work more to control interest rates and inflation in order to preserve the long-term stability of money demand.

2.2. Study (Abdul Rishad, Akhil Sharma and Sanjeev Gupta, 2018) (Abdul Rishad, Akhil Sharma and Sanjeev Gupta, 2018)

This research using the ARDL model to examine the M3 money demand function in the Indian economy using annual data on per capita GDP, the exchange rate, and the inflation rate during a 41-year period starting in 1975. M3 and its determinants have a substantial long-term cointegration connection, according to the study. Additionally, the study discovered that while money demand's elasticity with regard to the exchange rate is negative, it is positive in relation to GDP and inflation. Both the stability of the money demand function in the Indian economy and the efficacy of using the M3 index as a benchmark for monetary policy choices are supported by the findings of the CUSUM and CUSUMQ studies.

2.3. Study (Saten Kumar and Mamta Chowdhury, 2013)

This study used cross-sectional data for eleven OECD nations to derive cointegration equations for the demand for money. It looked at how the financial shifts in various nations affected the demand for money. According to the study, financial reforms made money demand less elastic in relation to income and more susceptible to changes in interest rates.

2.4. Study (Takeshi and Shigeyuki, 2008)

This study examined the money demand function in India using monthly data from 1980 to 2007 and annual data from 1976 to 2007. The results of the cointegration test showed that when the money supply was represented by M1 and M2, a cointegration vector between actual cash balances, interest rates, and output was discovered. Nevertheless, the money demand function lacks a long-run equilibrium connection when the money supply is represented by M3. Additionally, when estimating the money demand function using the dynamic least squares method, it was found that the coefficients on output and interest rate have signs that are consistent with theoretical predictions, and the statistical significance was confirmed when the money supply is represented by either M1 or M2. It is thought that it is better to concentrate on

the M1 or M2 indicators when implementing monetary policy, even if the Central Bank of India now employs the M3 indicator to predict future price changes.

2.5. Study (James M. Boughton, 1992)

This study compared the demand for money before and after financial innovations and shifts in monetary policy regimes across a wide range of economies, including all seven industrialized countries. The study examined financial innovations and shifts in monetary systems in an attempt to detect and evaluate changes despite the difficulty of measuring them. However, these international comparisons, as indicated by the study, were useful in determining the effects of these shifts and changes on the money demand function. According to the study, innovations have had a wide range of consequences, and the demand for money is typically no less steady than it was before to those changes.

3. Data and Methodology

In order to accomplish the study goal, yearly data for GDP and monetary variables (interest rate R, exchange rate EX, inflation rate INF, and broad money supply M2) were gathered from the Central Bank of Iraq's annual statistics bulletins for the years 2003–2024. In order to ascertain the long-run equilibrium relationship and then the short-run dynamic effects of the monetary variables on the money demand function, the impact of the aforementioned monetary variables on the money demand function was measured using the autoregressive distributed lag (ARDL) methodology and related statistical tests. The following functional form can be used to display the standard equation utilized in the estimation:

$$\Delta M2 = c + \lambda M2_{t-1} + \beta_1 R_{t-1} + \beta_2 EX_{t-1} + \beta_3 INF_{t-1} + \beta_4 GDP_{t-1} \sum_{i=1}^n a_1 \Delta M2_{t-i} + \sum_{i=0}^m a_2 \Delta R_{t-i} + \sum_{i=0}^m a_3 \Delta EX_{t-i} + a_4 \Delta INF_{t-i} + \beta_5 GDP_{t-i} + \mu_t$$

4. Econometric Analysis

4.1. Stability Test

The findings displayed in Table (1) were obtained using Eviews 12 using the Augmented Dickey-Fuller (ADF) test to define the order of integration and identify whether the variables are stationary or non-stationary, i.e., whether they include a unit root or not. It was discovered that all variables remain stable at the levels, regardless of whether there is an intercept alone or an intercept together with a linear trend; in other words, they do not have a unit root and do not experience false regression. The time series are integrated of order zero, or I(0), since stationary was verified at the 1%, 5%, and 10% significance levels.

Table 1: Augmented Dickey-Fuller Unit Root Test

<u>At Level</u>						
		M2	R	EX	INF	GDP
With Constant	t-Statistic	-3.8214	-2.6230	-3.1600	-2.0709	-3.8031
	<i>Prob.</i>	0.0097	0.1050	0.0380	0.2572	0.0097
		***	n0	**	n0	***
With Constant & Trend	t-Statistic	-2.4060	-4.5198	-3.5914	-3.6945	-3.6673
	<i>Prob.</i>	0.3656	0.0096	0.0565	0.0514	0.0479
		n0	***	*	*	**
Without Constant & Trend	t-Statistic	3.3339	-0.8453	-0.5560	-2.3429	2.5469
	<i>Prob.</i>	0.9993	0.3365	0.4641	0.0217	0.9957
		n0	n0	n0	**	n0
<u>At First Difference</u>						
		d(M2)	d(R)	d(EX)	d(INF)	d(GDP)
With Constant	t-Statistic	-10.5197	-3.9742	-3.4310	-3.8894	-3.8836
	<i>Prob.</i>	0.0000	0.0074	0.0227	0.0106	0.0085
		***	***	**	**	***
With Constant & Trend	t-Statistic	-11.8594	-4.3737	-3.6819	-2.6988	-3.8991
	<i>Prob.</i>	0.0000	0.0167	0.0492	0.2492	0.0319
		***	**	**	n0	**
Without Constant & Trend	t-Statistic	-8.1750	-4.0836	-3.5350	-4.3651	-3.3796
	<i>Prob.</i>	0.0000	0.0004	0.0013	0.0002	0.0019
		***	***	***	***	***

Source : Researcher's calculations based on Eviews 12 output.

*** Indicates stationary at the 1% significance level.

** Indicates stationary at the 5% significance level.

* Indicates stationary at the 10% significance level.

4.2. Estimation of the Autoregressive Distributed Lag (ARDL) Model for the Money Demand Function

After establishing if the variables are stationary, the first step is to estimate the ARDL model for the money demand function (M2). The expected outcomes of the ARDL model are shown in Table (2). The estimated model's explanatory power ($R^2=0.989749$) indicates that the independent variables in the model account for 98% of the variability in the dependent variable. Furthermore, the estimate results show that, at the (F) test at the (%1) significance level, the model as a whole is statistically significant. Consequently, we reject the null hypothesis ($H_0: \beta = 0$) and adopt the alternative hypothesis ($H_1: \beta \neq 0$).

Table 2: Results of the ARDL Model of the Money Demand Function in Iraq for the period (2004-2024)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
M2(-1)	0.289806	0.139736	2.073948	0.0585
R	-0.015206	0.006882	-2.209450	0.0457
EX	0.933078	0.589543	1.582714	0.1375
EX(-1)	1.325552	0.641332	2.066874	0.0593
INF	-0.016582	0.004153	-3.992433	0.0015
GDP	0.372969	0.195779	1.905050	0.0791
GDP(-1)	0.215019	0.217429	0.988918	0.3408
C	-14.13860	4.138624	-3.416256	0.0046
<hr/>				
R-squared	0.989749	Mean dependent var	18.03163	
Adjusted R-squared	0.984229	S.D. dependent var	0.785753	
S.E. of regression	0.098678	Akaike info criterion	-1.511580	
Sum squared resid	0.126585	Schwarz criterion	-1.113667	
Log likelihood	23.87159	Hannan-Quinn criter.	-1.425223	
F-statistic	179.3037	Durbin-Watson stat	1.742822	
Prob(F-statistic)	0.000000			

Source: Researcher's calculations based on Eviews 12 output.

4.3. Bounds Test of the Estimated Money Demand Function

Table (3) displays the boundary test results. At the 1% significance level, the computed F-statistic value of 23.83730 unquestionably surpasses the upper bound critical value of 4.37 and the lower bound critical value of 3.29. Since this demonstrates the existence of a cointegration relationship, we reject the null hypothesis that there is no cointegration.

Table 3: Results of the ARDL Model of the Money Demand Function in Iraq for the period (2004-2024)

Test Statistic	Value	K
F-statistic	23.83730	4
Signif.	$I_{(0)}$ Bound	$I_{(1)}$ Bound
10%	2.2	3.09
5%	2.56	3.49
2.5%	2.88	3.87
1%	3.29	4.37

Source: Researcher's calculations based on Eviews 12 output.

4.4. Diagnostic Tests of the Money Demand Function

Because the probability value of the F-statistic is insignificant at the 5% significance level, Table (4) clearly demonstrates that the estimated model is free of heteroscedasticity and serial correlation in the residuals according to the Breuch-Pagan-Godfrey test and the Breuch-Godfrey test. With a probability value of (0.16) (greater than 5%), the Jarque-Bera test verifies the residueals' normality. Therefore, it is impossible to reject the null hypothesis of normality, which states that the residuals are regularly distributed as seen in Figure (1).

Table 4: Diagnostic Tests of the Money Demand Function

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
Null hypothesis: Homoskedasticity			
0.9849	Prob.F(7*13)	0.180022	F-statistic
0.9674	Prob. Chi-Square(7)	1.855746	Obs*R-squared
0.9976	Prob.Chi-quare(7)	0.782119	Scaled explained SS
Breusch-Godfrey Serial Correlation LM Test:			
Null hypothesis: No serial correlation at up to 2 lags			
0.3280	11)*Prob. F(2)	1.235705	F-statistic
0.1457	Prob. Chi-Square(2)	3.852575	Obs*R-squared

Source: Researcher's calculations based on Eviews 12 output.

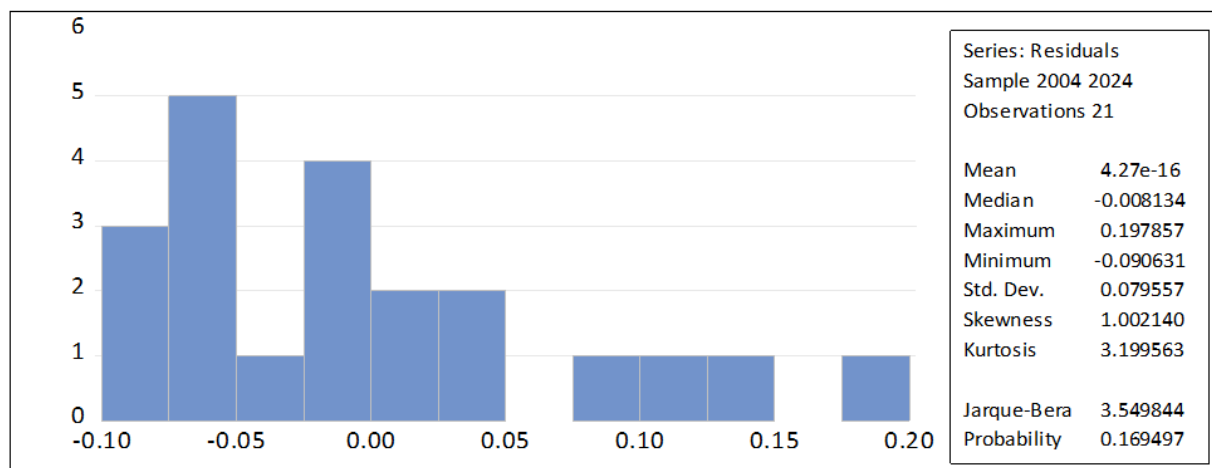


Figure 1: Distribution of Residuals

Source: Eviews 12 program outputs.

4.5. Structural Stability Test of Model Parameters

Because the cumulative sum of residuals is within the critical values restrictions, the CUSUM test in Figure (2) demonstrates that the estimated parameters are stable at the 5% significance level.

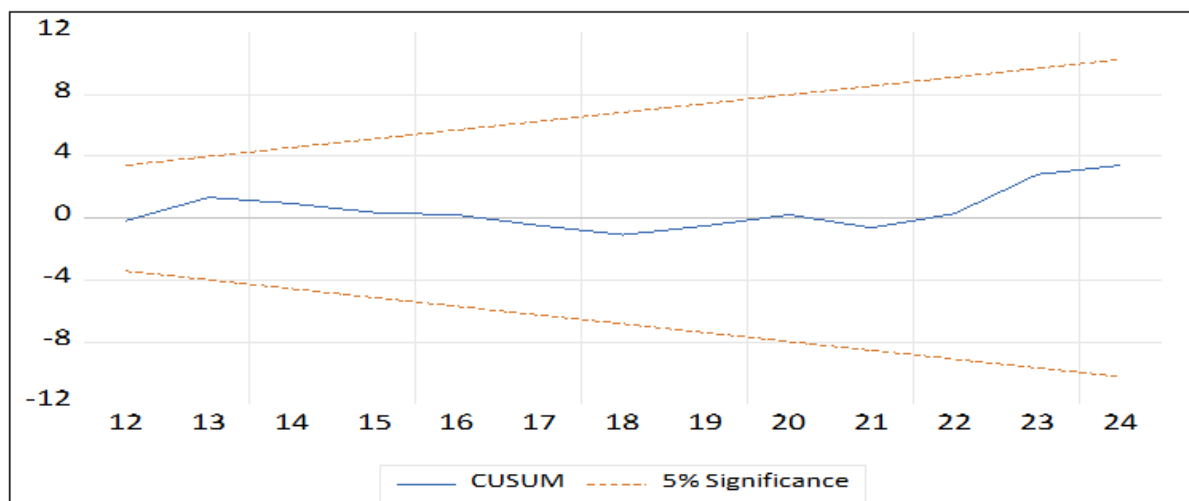


Figure 2: Test of Parameter Stability

Source: Eviews 12 program outputs.

4.6. Estimating the Error Correction Model for the Money Demand Function

Table 5: Short-Run Coefficients and Error Correction Form

Variable	Coefficient	Std. Error	Prob.
D(EX)	0.933078	0.416955	0.0434
D(GDP)	0.372969	0.106756	0.0040
CoIntEq(-1)*	-0.710194	0.050467	0.0000
R-squared	0.932996	Mean dependent var	0.195005
Adjusted R-squared	0.925551	S.D. dependent var	0.307344
S.E. of regression	0.083860	Akaike info criterion	-1.987771
Sum squared resid	0.126585	Schwarz criterion	-1.838553
Log likelihood	23.87159	Hannan-Quinn criter.	-1.955387
Durbin-Watson stat	1.742822		

Source: Researcher's calculations based on Eviews 12 output.

The test findings in Table (5) clearly show that money demand and the dollar exchange rate are positively correlated. For every unit increase in the exchange rate, the demand for money rises by (0.93) units, with importance at the 5% level. Economic theory is in line with this result. The exchange rate and money demand are positively correlated because rising exchange rates encourage individuals to convert their foreign currency assets into local currency. Conversely, when the exchange rate declines, individuals anticipate a future rise in its value, prompting them to exchange local banknotes for foreign currency and thus reducing their demand for

money. Moreover, this variable (the exchange rate) captures an important linkage between the local currency and foreign currencies. As is well known, individuals in developing countries prefer to hold foreign currencies, viewing them as safe assets that help balance their financial portfolio. In such countries, including Iraq, bond trading remains limited due to low financial awareness, underdeveloped banking activity, and a lack of confidence in bond issuers-even governmental ones.

Additionally, the estimation results show that GDP and money demand are positively correlated. The demand for money increases by (0.37) units for every unit rise in output, which is significant at the 1% level. This is likewise consistent with economic logic, as income is directly related to money demand: higher income leads to greater allocation for transactions purpose. In other words, money demand rises with income because individual seek to satisfy their multiple needs by increasing their holdings of money to complete transactions and purchases, as well as meet precautionary or reserve requirements.

The error correction coefficient, or speed of adjustment, is negative and statistically significant at the 1% level: $CointEq = -0.710194$. This implies that (71%) of short-run disequilibria are corrected within one year (the unit of time) so that the system returns to long-run equilibrium. The time required to restore long-term equilibrium is given by $\frac{1}{Coefficient} = \frac{1}{0.710194} = 1.4$ years, or approximately one year and four months.

4.7. Predictive Performance Test of the Error Correction Model

Based on the results of Figure (3), Thiel's inequality coefficient is (0.002254), which is less than one (indicating high predictive accuracy). The bias proportion (BP= 0.0002594) is close to zero, The variance proportion (VP= 0.000942) is also close to zero, and the covariance proportion (CP= 0.998464) is close to one. These values indicate that the model possesses strong predictive power over the research period and can be relied upon for forecasting future values and for evaluating policies in order to support appropriate economic decisions aimed at achieving the planned objectives.

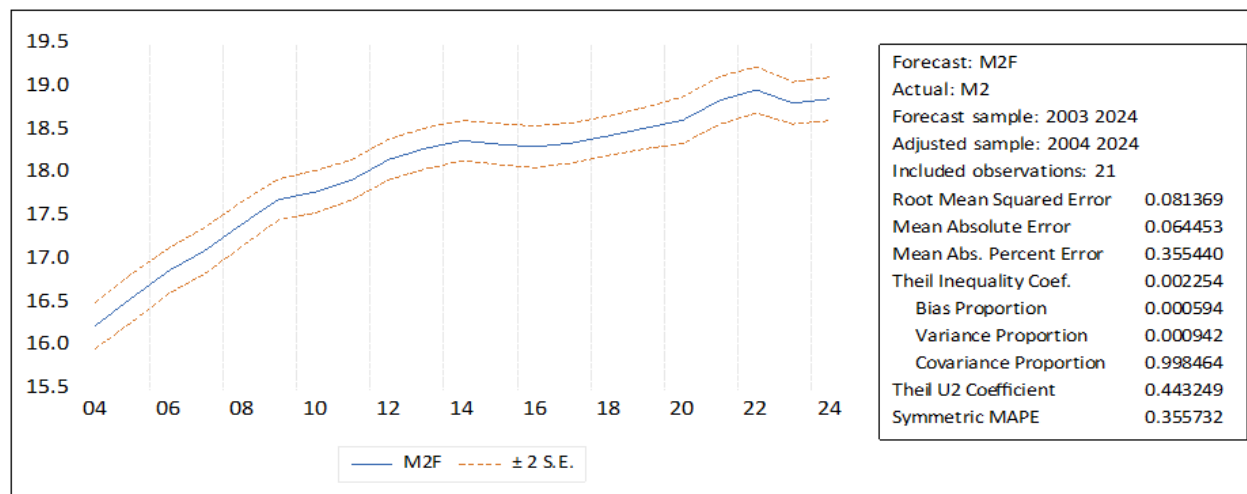


Figure 3: Predictive Performance Test of the Error Correction Model

Source: Eviews 12 program outputs.

4.8. Long-Run Relationship of the Money Demand Function

Table (6) makes it evident that there is a negative correlation between the interest rate and the demand for money. When interest rates decline, the demand for money increases, and when they rise, it decreases. Individuals and producers prefer to keep cash and sell their bonds (whose values rise) when interest rates drop because it lowers the opportunity cost of owning money. However, as the opportunity cost of holding money increases when interest rates rise, speculators—individuals and institutions—tend to buy bonds, whose prices decline in proportion to their cash holdings. This lowers the demand for money. It has been observed that, at the 5% level, a one-unit drop in interest rates causes the demand for money to rise by (0.02) units.

The estimation results also show that the demand for money and the exchange rate are positively correlated: a one-unit increase in the exchange rate results in a significant (1%) increase in the demand for money of 3.180299 units. This occurs because when the exchange rate is higher, people are more likely to convert foreign currency notes into local currency, increasing the demand for money.

The price level and money demand have a negative long-term connection; for every unit rise in the price level, the demand for money decreases by (0.023348) units, which is substantial at the (1%) level. This is due to the fact that people exchange their local currency with foreign money

or real assets whose value increases with inflation as the local currency's buying power declines. As a result, most people stop using the local money, which lowers demand for it.

Finally, the long-run estimation results a positive relationship between the demand for money and GDP. An increase in GDP by one unit raises the demand for money by (0.827926) units, significant at the (1%) level. This is because higher GDP implies higher income levels. When income rises, individuals seek to satisfy their various needs by increasing their money holdings for transactions purposes, purchases, and precautionary reserves.

Table 6: Long-Run Coefficients of the Money Demand Function

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R	-0.021411	0.009493	-2.255396	0.0420
EX	3.180299	0.783007	4.061647	0.0013
INF	-0.023348	0.007940	-2.940396	0.0115
GDP	0.827926	0.237732	3.482602	0.0040
EC = M2 - (-0.0214*R + 3.1803*EX -0.0233*INF + 0.8279*GDP - 19.9081)				

Source: Researcher's calculations based on Eviews 12 output.

Conclusion and Recommendations

The two most significant factors in the short-run money demand function throughout the study period are GDP and the Iraqi dinar's exchange rate versus the dollar, according to the estimate results and the error correction model test. The error correction coefficient of 0.71 indicates that it takes around one year and four months to correct short-run disequilibria and return to the long-run equilibrium state. Additionally, the CUSUM test showed that the money demand function was stable, which is advantageous for the economy as the money demand function's stability is essential. It has been clear over time that every component of the demand for money function significantly affects Iraq's financial requirements. Lastly, the model exhibits high predictive power over the research period and can be relied upon for future forecasting and for evaluating policies to support appropriate economic decisions that achieve the planned objectives, according to the Thiel's inequality coefficient test, which produced a value less than one.

In conclusion, it can be stated that monetary policy in Iraq, despite its dependence on fiscal policy for structural reasons, remains central to its objectives. Nevertheless, it has succeeded in

adapting monetary relations and aligning them with the phenomenon of money demand. It has also sustained the momentum of stability in the money demand function through the foreign exchange market window, which it adopted as a nominal anchor for the national currency. Therefore, monetary policy has mastered the art of managing the expansion or contraction of monetary assets and has attained monetary equilibrium in the monetary market. This has contributed to monetary stability despite the limited number of monetary alternatives, the growing phenomenon of dollarization and speculation in real assets, the weak role of the interest rate, and chronic reliance on operating under the umbrella of fiscal policy.

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