

The Impact of News on Exchange Rate Volatility: Evidence from Afghanistan

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ABSTRACT

This empirical study explores how news events affect the exchange-rate return volatility of the USD/AFN and whether positive and negative news shocks have asymmetric effects on the exchange-rate volatility. In this study, the daily exchange rate data for USD/AFN are taken from the website of Da Afghanistan bank, from January 2023 to May 2026, and are 1034 observations. There are six types of news events: aid inflows, aid suspension, economic, political, migration, and monetary. Second, aggregated positive and negative news variables are also created to look at the asymmetric effects of news shocks. The empirical analysis uses Autoregressive Moving Average and Autoregressive Conditional Heteroscedasticity models, to reflect the dynamic properties and the time-varying volatility of the series of exchange rates. The results suggest volatility clustering of the USD/AFN exchange rate, which implies that volatility levels aren't randomly distributed across time, but instead volatility extremes tend to stick around, while past information helps explain volatility levels today and predict volatility in the future. The findings also indicate that the news is more likely to influence the volatility of exchange rates than the returns. The news categories analyzed reveal that aid suspension, economic, political and monetary news have a significant impact on exchange-rate volatility, while migration news has no significant impact at all. The analysis also has evidence of the asymmetric reactions to news shocks, in the sense that negative news shocks cause much more volatility than positive news shocks. The results underscore the need to monitor news-related shocks and enhance information management in the foreign-exchange market in Afghanistan and give relevant inputs to the policymakers, Da Afghanistan Bank, financial institutions, and foreign-exchange market players for assessing and managing exchange-rate risk.

KEYWORDS: Afghanistan, GARCH Model, Exchange Rate Volatility, News Impact, USD/AFN

1. INTRODUCTION

Understanding exchange rate volatility is crucial for trade sustainability and economy balance as policy makers use them when adjusting monetary policy especially when price inflation imported from other economies (Peichl & Mitnik, 2025). Because exchange rate shows the relative cost of goods and services, when they

change, they can make adjust export competitiveness, tweak profit margin, impact import cost and investment decision which are very important for businesses trading worldwide (Pokharel, 2025). Predicting exchange rate is a very difficult but necessary task and therefore every attempt to enhance its accuracy is warranted. Numerous entities such as multinational enterprise, monetary authorities, government, banks, foreign exchange market participants and economic analysts require reliable forecasts to shape policy choice and manage financial exposure (Kallianiotis, 2023). There are plenty of articles that confirm the news effect on exchange rate. Exchange rate volatility is an important factor to consider in economic analysis because of its substantial effect on economic stability and growth. Such fluctuation arises from multiple sources like international capital movement, geopolitical events monetary policy in leading in leading economies and change in investors' perceptions and expectations (Jannet & Barguellil, 2024). This study aims to investigate the impact of announcement or news on the pricing dynamics of AFN-USD exchange rate in the foreign exchange market of Afghanistan. In this topic, independent variables are fundamental economic variables and news about exchange rate. Topics of news capture the main concept of news that might attract attention of market participants. These topics are interpreted from an economic perspective, the extracted topic information is used to predictive and causal effect in exchange rate dynamics. Causality is examining by isolating news shocks related to exchange rate concept and studying exchange rate responses (Gründler, Mayer, & Scharler, 2023).

Exchange rate volatility refers to fluctuation in currency value overtime period that show uncertainty rather than exact risk level or we can say that how much currency value fluctuate and reflect market uncertainty. As exchange rate movement affects international investment return and trade competitiveness so it is very crucial for global investors. Since it cannot directly be observed, it is measured using proxy indicators and modelled through approaches like GARCH, EWMA, and implied volatility models, however volatility behaviour is complex and varies across markets, making prediction challenging (Tondapu, 2024). Exchange rate volatility refer to continuous fluctuation in currency value driven by economic and political factors and this volatility or constant change in exchange rates, influenced by macroeconomic conditions and global factors that lead to instability in financial market. This fluctuation adversely affect investment, trade balance and impose risk to economic growth (BABAZADEH, 2024). Exchange volatility has long been a key focus in economics and finance so proper forecasting is vital for policymakers and investors, as it influence central bank actions and trading strategies so to deliver more accurate forecasts and better portfolio performance, we need to advance model in compare to traditional models (Martins & Lopes, 2024).

Exchange rates are among the most important macroeconomic variables in an open economy because they influence international trade, domestic prices, investment decisions, and overall economic stability. Previous

research has shown that exchange rates can respond rapidly to economic fundamentals, monetary and fiscal policies, and new information entering financial markets. The Evans & Lyons (2002) research presents a novel exchange rate model according market microstructure that explains combination of microeconomic structures with macroeconomic fundamentals provide better understanding of volatility in exchange rate. In another study indicated that A very simple market model (Noise Trader Behavioural Model) with heterogeneous agent can replicate common patterns seen in financial market like heavy tiled return distribution and long memory in fluctuation (ALFARANO & Lux, 2007).

There is limited research on how news events affect exchange rate volatility in Afghanistan. Previous studies have rarely used advanced ARCH/GARCH and asymmetric models and have largely ignored the effects of political and security news. Furthermore, no comprehensive framework has integrated news shocks with exchange rate volatility. Therefore, this study addresses these gaps by examining the impact of different news events on the USD/AFN exchange rate volatility.

1.1 Problem Statement

In the current expanding of globalization, global environment and elevated currency volatility exchange rate increasingly effect routine operations and profitability of and business performance as this effect of is evident across companies of all size. In recent decades international trade has increased rapidly because of technology advancement, lower costs and lower trade barriers that this trend has important consequences for exchange rate and economy stability (Ortega & Giovanni, 2005). A study in Afghanistan about exchange rate volatility shows that exchange rate volatility do not significantly affect Afghanistan trade flow but early estimates show a positive effect of depreciation or may slightly boost export this is due to Afghanistan mainly export low value agriculture goods and inelastic goods and also because of country traditional export structure and non-price barriers like processing capacity and poor transportation (Shahab, Aslami, & Shahidi, 2020). Despite extensive global research on exchange rate volatility and news impact, there is a significant lack of empirical evidence focusing on Afghanistan, and also considerable research in Afghanistan highlighting the role of exchange rate but most of these studies have not taken into account impact of news and information on its movement. This represents significant gap in the literature. Existing researches have largely ignored the role of news-driven shocks, in influencing exchange rate movements. And also, the application of advanced volatility model and analysis of asymmetric news effects like ARCH & GARCH remain underexplored in the Afghanistan Context. This study aims to fill these gaps examining how different type of news impact exchange rate fluctuation in Afghanistan using appropriate econometric techniques.

1.2 Research Objectives

1. To test the volatility and persistence of the USD/AFN exchange rate using the ARMA GARCH model.
2. To investigate the impact of different categories of news, including Aid Inflow, Aid Suspension, Economic, Political, Migration, and Monetary news, on the returns and volatility of the USD/AFN exchange rate in Afghanistan.
3. To assess whether positive and negative news shocks exert different effects on the volatility of the USD/AFN exchange rate.
4. To identify which categories of news, have the strongest influence on exchange-rate volatility and to evaluate their relative importance in explaining fluctuations in the Afghan foreign-exchange market.
5. To develop an empirical framework that incorporates news-based indicators into a GARCH volatility model for explaining exchange-rate dynamics in Afghanistan.

1.3 Research Questions

This research conducted to answer the following questions:

1. To what extent do news influence the returns and volatility of the USD/AFN exchange rate in Afghanistan?
2. Do positive and negative news shocks exert different effects on exchange-rate volatility in Afghanistan?
3. What are the characteristics of volatility in the USD/AFN exchange-rate market?
4. Does the GARCH model adequately capture the volatility dynamics of the USD/AFN exchange rate?
5. Which categories of news have the strongest impact on USD/AFN exchange-rate volatility?

1.8 Hypothesis Development

Hypothesis 1: News shocks have statistically significant effect on exchange rate volatility

Hypothesis 2: Negative news shocks have a greater impact on volatility than positive news shocks

Hypothesis 3: Exchange rate volatility exhibit a persistence behaviour across time periods.

Hypothesis 4: Political and Aid related news has a stronger impact on exchange rate volatility than other type of news.

Hypothesis 5: Exchange rate in Afghanistan do not fully and instantly reflect publicly available information.

1.5 Significance of the Study

This study is significant because it examines how news events affect the volatility of the USD/AFN exchange rate in Afghanistan. It contributes to the limited literature on exchange rate behaviour in a conflict-affected and aid-dependent economy. The study applies the ARMA–GARCH model and daily exchange rate data to analyse the effects of different news events, including humanitarian aid, political developments, monetary policy, economic events, and migration. Methodologically, it provides a useful framework for future research. The

findings can help Da Afghanistan Bank, policymakers, financial institutions, businesses, NGOs, and international organizations improve exchange rate forecasting, financial planning, and risk management. The study also highlights the importance of transparent and timely information in reducing market uncertainty and supporting exchange rate stability in Afghanistan.

2. LITERATURE REVIEW

Exchange Rate Exposure and Apprehension is a global study written in reactive style where exchange rate volatility underpins economic system stability, trade flow decisions and investment decisions. The findings in the paper emphasize that variations in exchange rates are driven by synergetic historical forces, speculative function and competitiveness pressure which makes volatility problematic to contain and prognoses. Such fluctuations can have large effects on macroeconomic performance and international financial markets. Amidst these problems, the study also points out some areas where exchange rate volatility can be lowered (Ghauri, Ahmed, Streimikiene, Qadir, & Hayat, 2024). Technology and the financial instruments themselves, can also assist businesses and investors adjust their risk management practices. In addition, findings highlight that the joint policy approach is encouraged to prevent excess exchange rate volatility because of numerous risks linking fluctuating currency value and economic shocks, market participant's instrumentality and knowledge deepening (Oladutire, Soyinka, & Akinola, 2024). Previous shocks have further impacts on modern fluctuations over long time spans. Such persistence also shows that shocks to currency markets have persistent implications, which is all the more reason monetary authorities must act in a timely manner when faced with adverse shocks or bad news because such events produce larger increases in volatility than corresponding good news events. Shocks in one currency market spill over into others, exchange rate volatility is persistent, asymmetric and interconnected across countries such volatility allows macroeconomic instability through the effects of inflation, capital flows and trade to intensify economic vulnerability in globally linked international markets (Umoru, et al., 2023).

The trading process itself is key to understanding short-run exchange rate dynamics, since the interaction between informed and uninformed agents, together with market structure determines how information is incorporated into exchange rates (King, Osler, & Rime, 2013). Exchange rates in small open economies are strongly influenced by external factors rather than only domestic shocks. In Afghanistan, remittance inflows generated by overseas workers constitute an important source of foreign currency and can partially offset external financing constraints, making migration-related financial flows relevant for exchange-rate stability (Zaheer et al., 2025). Exchange rate behaviour is largely shaped by external imbalances and global financial

conditions, which help explain both exchange rate movements and UIP deviations in small open economies (Cormun & Leo, 2026).

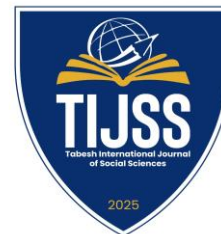
In the short run, price distortions can be partially managed through policy interventions such as foreign exchange auctions and administrative price controls. However, in the long run, exchange rate pass-through becomes more pronounced, especially in an economy heavily dependent on imports and lacking diversification. Countries like Afghanistan should prioritize structural reforms aimed at economic diversification and reducing import dependence. It also emphasizes reducing reliance on foreign currencies to improve the effectiveness of monetary policy and strengthen the national currency (Arian & Arabi U, 2021). Forecasting accuracy varies across time periods, with better performance in earlier sample periods that reflect key economic conditions, while later periods capture the effects of political instability and events like the COVID-19 pandemic, accurate modeling of exchange rate volatility is crucial for informed decision-making. Such models provide valuable insights for policymakers, researchers, and businesses in managing risks and evaluating the implications of exchange rate movements (Arian, 2025)

3. RESEARCH METHODOLOGY

This study draws its relationship on the basis of news impact curve (NIC) theory, which recognized and developed by Engle & Ng (1993) and updated by Zakoian (1994) through advance volatility model TGARCH, Baillie, Bollerslev & Mikkelsen (1996) through FIGARCH and component GARCH (1999) as cited by Atoi (2014). These update and development enhance the ability of NIC theory to capture asymmetry, persistence and real time effects of news over volatility. The theory of NIV is based on the GARCH model which itself is an extension of ARCH as it uses past shocks and past volatility, it testing and measuring how news put impact on volatility or how new information affect volatility in the future in financial market. This theory indicated that bad news or negative news or shocks increase volatility more than good news that called asymmetric effect. Monetary model of exchange rate explains how monetary variables impact on currency value like the variables or factors of money supply, income prices the study by Frankel, (1984) tested in two version of the model, one the fixable prices and another is sticky price or assuming price adjust slowly but both of them show explanation of the model so this led researcher to find ways for improving monetary model.

3.1 Data and Empirical Analysis

This study adopts a quantitative and explanatory research approach to investigate the impact of news shocks on the volatility of the USD/AFN exchange rate in Afghanistan. The quantitative approach is appropriate because



it enables the measurement and statistical analysis of relationships between news-related information and exchange-rate behavior using numerical data and econometric techniques.

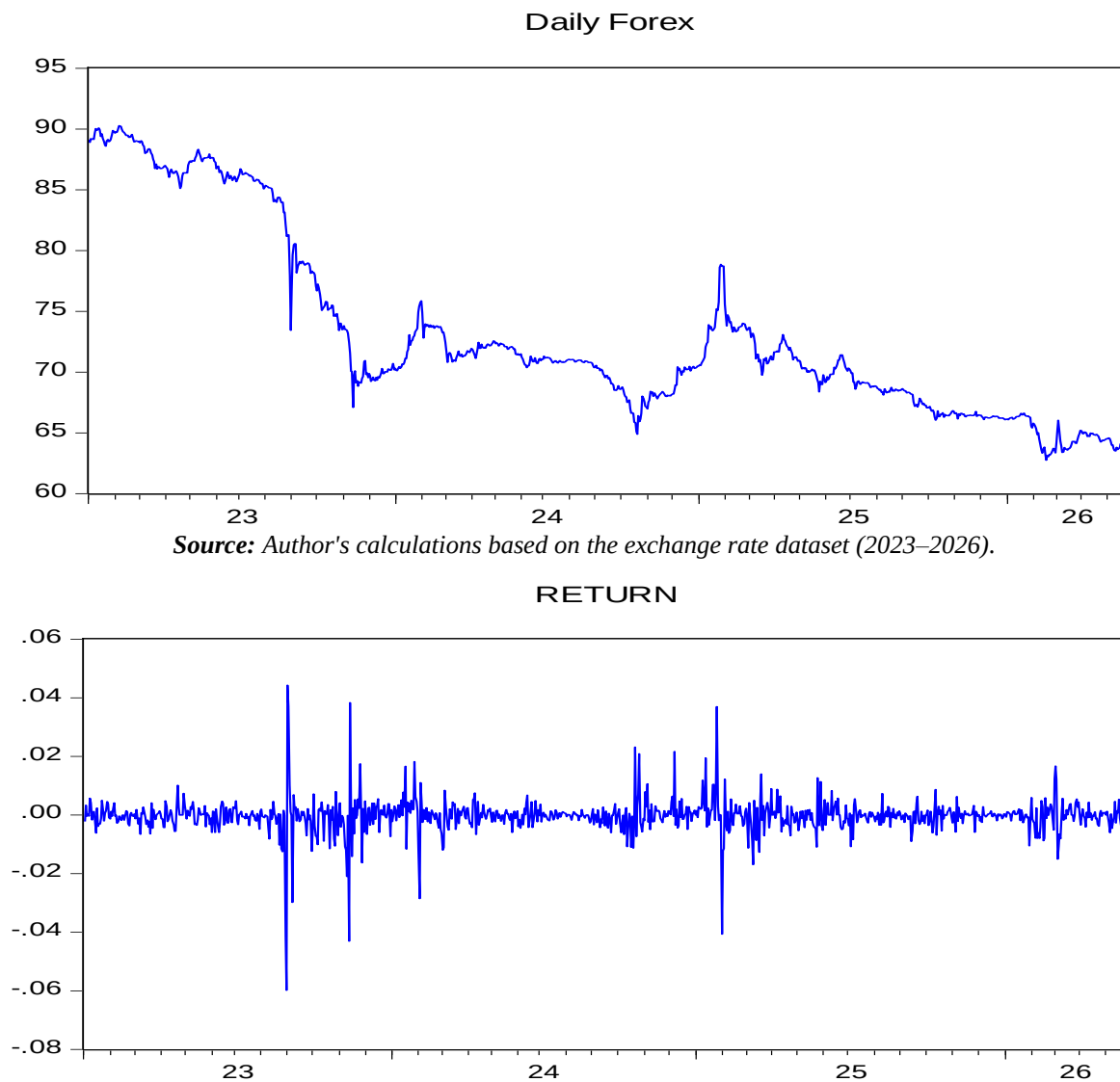
The research relies exclusively on secondary data in publicly available sources. Daily USD/AFN exchange-rate data covering the period from January 2023 to May 2026 were collected from Da Afghanistan Bank, resulting in 1,034 observations after data adjustments. In addition to exchange-rate data, news events were gathered from official reports, government announcements, international organizations, central bank publications, and credible media sources. To facilitate empirical analysis, news events were systematically classified into six categories: Aid Inflow, Aid Suspension, Economic, Political, Migration, and Monetary news. Qualitative news information was converted into quantitative variables through a coding procedure, where positive news events were assigned a value of +1, negative news events a value of -1, and periods without relevant news a value of 0.

Given the fact that exchange-rate markets quickly respond to new information, we used daily time-series data. Daily observations are best suited to measure short-term market reactions and volatility dynamics. The ARMA-GARCH framework was used to carry out the empirical analysis. The ARMA model was used to get the right mean equation for exchange-rate returns. Subsequently, the GARCH model was used to analyze volatility clustering and volatility persistence. Furthermore, positive and negative news indices were constructed to evaluate whether favorable and unfavorable news shocks exert asymmetric effects on exchange-rate volatility. Given that exchange rates are inherently volatile and often exhibit non-stationary characteristics, the study applies logarithmic transformation of exchange rate returns to ensure a more reliable econometric analysis. The return series is computed as:

$$r_t = \ln(fx_t) - \ln(fx_{t-1}) \quad (1)$$

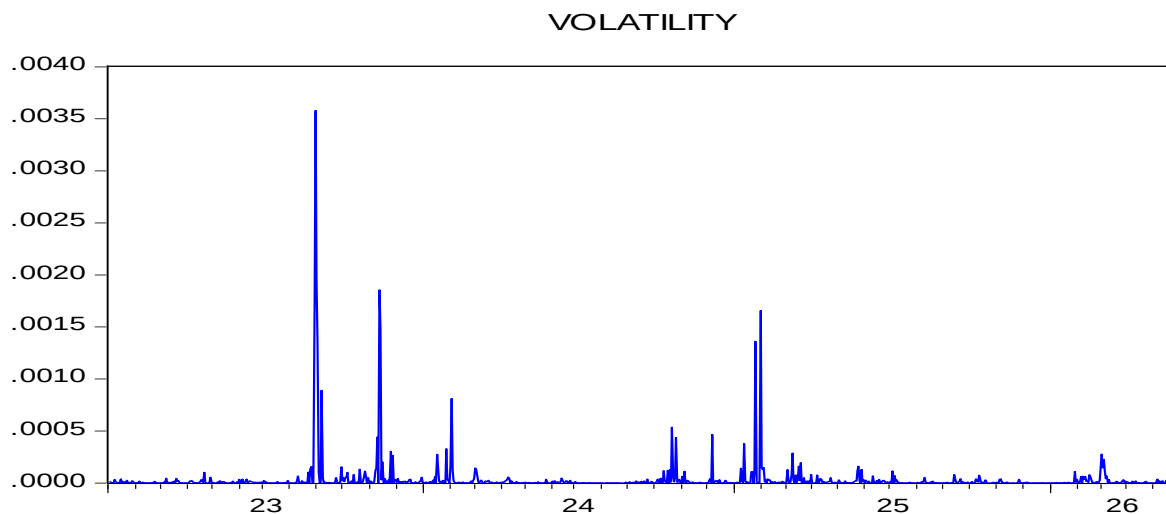
In equation 1, r_t is known as the exchange rate return at period t ; $\ln(fx_t)$ and $\ln(fx_{t-1})$ stand for the log of the exchange rate of the AFN/ US dollar at time t and the previous immediate time $(t - 1)$. Fig 1 shows Daily Forex (a), return (b), and volatility (c), indicating the AFN/ USD movements over the time horizon, the volatility of the exchange rate about the mean, and volatility clustering of financial return.

Figure 1: Daily Forex (a), return (b), volatility (c)



Source: Author's calculations based on the exchange rate dataset (2023–2026).

Source: Author's calculations based on the exchange rate dataset (2023–2026).



Source: Author's calculations based on the exchange rate dataset (2023–2026).

3.2 Properties of the Data

Before conducting the hypothesis testing, a descriptive statistic of the main variables performed to provide a general overview of the dataset. This analysis helps to better understand the distribution and characteristics of exchange rate volatility and news related variables within the study time period in Afghanistan. This step also provides a basis for the subsequent econometric analysis and volatility models used in the study.

Table 1: Statistics for AFN/USD return

Statistics	Value	Statistics	Value	Statistics	Value
Mean	-0.000320	Min	-0.059835	Kurtosis	31.20866
Median	0.00000	Std- Dev	0.005759	Jarque-Bera	34483.54
Max	0.044209	Skewness	-0.986140	Prob	0.00000

Source: Author's calculation in Eviews based on the exchange rate dataset.

The descriptive values of the exchange rate return series in table 1 indicate several important characteristics that justify the application of ARCH/GARCH models. The mean return is -0.000320, while the median return is 0, suggesting that the series fluctuates around a stable central value close to zero. The distribution exhibits negative skewness -0.986140, show an asymmetric distribution with a longer left tail and a greater likelihood of extreme negative returns. And, the kurtosis value 31.20866 is substantially bigger than the normal benchmark value of 3, indicating a leptokurtic distribution characterized by fat tails and a high frequency of extreme observations. The Jarque–Bera statistic 34,483.54 is more significant with a probability value of 0, show the exchange rate return series does not follow a normal distribution. The presence of negative skewness, excess kurtosis, and non-normality suggests volatility clustering and conditional heteroskedasticity, which are usual features of

financial time series. And so on, the statistical properties of the data strongly support the use of ARCH/GARCH models, as these models are specifically designed to model time-varying volatility and conditional heteroskedastic behaviour in financial markets.

4. RESULTS AND DISCUSSION

The stationarity test is constituent to models the exchange rate. This finds that the exchange rate with one period lag does not have a unit root from the ADF-statistics, and the exchange rate return rt is stationary at level in this study. The Augmented Dickey Fuller (ADF) test was performed for the USD/AFN exchange rate series to check for stationarity at level. Test Statistic ADF: -1.762888 is greater than the critical values at the 1%, 5%, and 10% levels -3.43 , -2.86 , and -2.57 respectively, Also the probability value greater than the conventional threshold of significance below 0.05. This indicates that the USD/AFN exchange rate series is non stationary in level form. This finding suggests that the exchange rate is governed by a stochastic process with time-varying behavior, an empirically observed feature of financial and exchange rate data. The existence of a unit root implies that shocks to the exchange rate may have persistent effects over time, causing the series to deviate from a constant mean and variance. Hence, the exchange rate series transformed into its first difference or logarithmic return form. The use of return data is appropriate because ARCH/GARCH models need for stationary time series to accurately estimate and capture the conditional variance and volatility.

Table 2: Augmented Dickey-Fuller test of the daily index and return

ADF for daily index	-1.762888	1 % Critical value	-3,43
ADF for daily returns	-24.49029	5% Critical value	-2,86
p value = 0.0000		10% Critical value	-2,57

Source: Author's calculations in Eviews based on the exchange rate dataset.

The (ADF) test for unit roots was employed to check the stationarity of the exchange rate return series. The statistics for the ADF test (given in Table 2) are $ADF = -24.49029$, $p \text{ value} = 0.0000$ The critical values for 1%, 5% and 10% significance level are -3.43 , -2.86 , and -2.57 respectively as the p -value was less than the conventional alpha level of 0.05 this finding tells us that the return series is stationary at level form, meaning that its mean, variance, and autocovariance remain relatively constant over time. The highly negative ADF value provides strong evidence against the presence of a unit root and confirms that the return series does not indicate accidental trend. The histogram of daily USD/AFN nominal exchange rate returns (2023–2026) point that most returns are concentrated around zero, positive skewness, implying that large positive exchange-rate movements occurred somewhat more frequently than large negative movements (Figure 2).

Figure 2: Histogram for Daily USD/AFN Nominal Exchange Rate Returns (2023-2026)

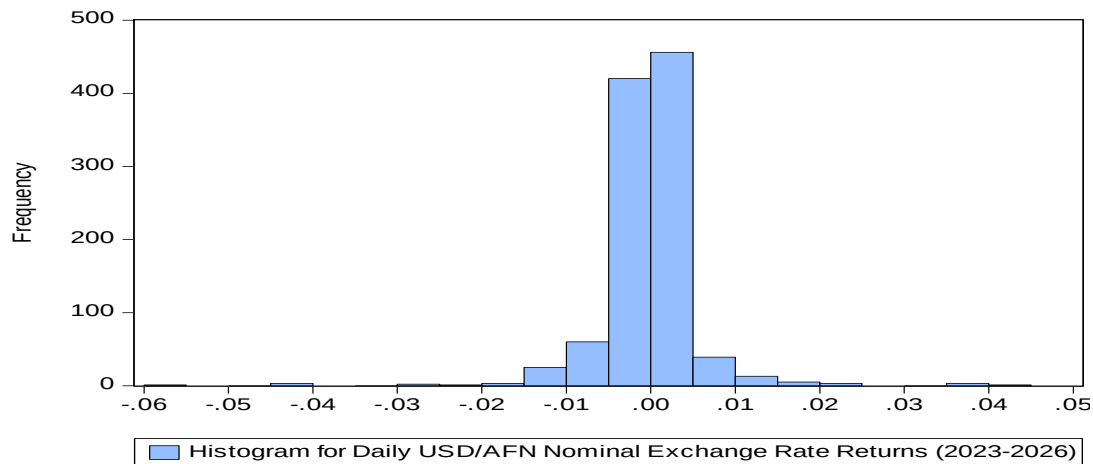
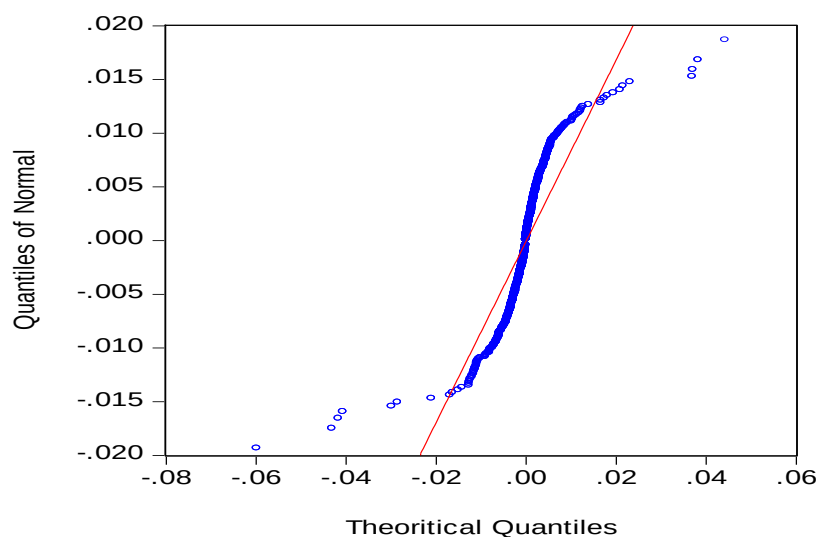


Figure 3 presents the normal Q-Q plot of the variable, the observed points display a pronounced S-shaped pattern, deviating from the reference line, particularly in both the lower and upper tails. As it shown in the central observation's substantial curvature rather than a linear alignment, indicating that the empirical distribution differs from the theoretical normal distribution. And additionally, several observations at the extremes are located far from the reference line, suggesting the presence of outliers and/or heavy-tailed behaviour. The S-shaped configuration points that the data may show non-normality, with evidence of departures in skewness and kurtosis in relation to a normal distribution, supporting the use of GARCH models, which do not require normality and are suitable for financial time-series data.

Figure 3: Q-Q normal plot for Daily USD/AFN Nominal Exchange Rate Returns (2023-2026)



4.1 ARMA Model Selection

Figure 3: The (ACF) and (PACF) of the exchange-rate return series

Autocorrelation			Partial Correl			AC	PAC	Q-Stat	Prob
*			*		1	0.075	0.075	5.8718	0.015
*			*		2	-0.108	-0.115	18.087	0
					3	-0.043	-0.025	19.978	0
					4	-0.009	-0.016	20.066	0
					5	-0.04	-0.047	21.769	0.001

Source: Author's calculations in EViews based on the exchange rate dataset.

Interaction with order to which ARMA will be specified with exchange-rate return series was investigated from evaluation of autocorrelation function (ACF) and partial autocorrelation function (PACF). Output in Figure 4 shows ACF and PACF spikes statistically significant at the first and second lags but low autocorrelations decreasing rapidly to zero. It shows short-run dependence in the funding return series, and suggests that the returns series are stationary. From the correlogram, different low order ARMA specifications were estimated such as; ARMA (1,1), ARMA (1,2), ARMA (2,1); ARMA (2, 2). Models were evaluated using the Akaike Information Criterion (AIC), Schwarz Information Criterion (SIC) and Log-Likelihood values. The selected model is based upon the lowest AIC and SIC, as well as the highest Log-Likelihood (Table 3).

Table 4: ARMA Model Selection Criteria

Model	AIC	SIC	Log-Likelihood
ARMA (1,1)	-7.482270	-7.467934	3871.333
ARMA (1,2)	-7.488230	-7.469115	3875.415
ARMA (2,1)	-7.487722	-7.468592	3871.408
ARMA (2,2)	-7.485967	-7.462055	3871.502

Source: Author's calculations in EViews based on the exchange rate dataset.

All the ARMA model comparison results are shown in Table 3. Of the four-candidate specification, the ARMA (1,2) model had the lowest AIC -7.48823 and SBC -7.469115 values as well as 3875.415 the highest Log-Likelihood value. Hence, mean equation ARMA (1,2) was chosen so as a next step we used further ARCH LM test and GARCH estimation.

4.2 Testing returns for heteroscedasticity

Before estimating the GARCH model, it is necessary to examine whether the return series exhibits conditional heteroscedasticity. Following Robert F. Engle, the ARCH-LM test is employed to determine whether the variance of the residuals is time-varying. The mean equation represented as:

$$R_t = \mu + \varepsilon_t$$

where R_t denotes the exchange-rate return, μ is the constant mean, and ε_t is the error term.

The ARCH-LM test examines whether the squared residuals are autocorrelated by estimating the following auxiliary regression:

$$\varepsilon_t^2 = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + u_t$$

If residual variance is not constant over time indicating heteroscedasticity and thereby allowing to use ARCH/GARCH-type models.

Table 5: ARCH-LM Test for Heteroscedasticity in Exchange Rate Returns

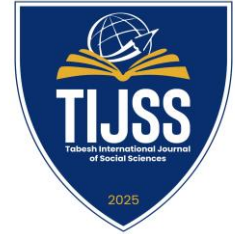
Statistic			Value.	Prob.
F-statistic			410.5043	0.0000
Obs*R-squared			294.0917	0.0000
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.52E-05	4.70E-06	3.2282	0.0013
RESID ² (-1)	0.533829	0.026348	20.2609	0.0000

Source: Author's calculations in Eviews based on the exchange rate dataset.

To examine the presence of conditional heteroscedasticity in the exchange-rate return series, the ARCH-LM test was performed on the residuals of the estimated mean equation. The results indicate that both the F-statistic (410.5043) and the Obs*R-squared statistic (294.0917) are highly significant, with probability values equal to 0.0000. Therefore, the null hypothesis of no ARCH effects is rejected at the 1% significance level. The high significance of the ARCH-LM test results offers strong verification for presence of conditional heteroscedasticity in return series. Moreover, the coefficient lagged squared RESID term (RESID (-1)²) is positive (0.5338), and also significant $p < 0.01$ revealing that the current volatility is affected by last volatility shocks. It indicates volatility clustering, the idea that high-volatility days typically cluster after other high vol-days and low vol-days top other lows. (Table 4).

Table 6: Mean and variance equation ARMA (1,2)-GARCH (1,1) model

Models	Parameters	Coefficient	Std. Error	z-Statistic	p-value
Mean equation- ARMA (1,2)	C	-0.000262	0.000935	-2.7973	0.0052
	AR(1)	0.282912	0.390531	0.7244	0.4688
	MA(1)	-0.253830	0.389615	-0.6515	0.5147
	MA(2)	-0.084954	0.032560	-2.6092	0.0091
Variance equation- GARCH (1,1)	ω (C)	0.00000913	0.000000861	10.6008	0.0000



	ARCH (1)	0.396131	0.030451	13.0087	0.0000
	GARCH (1)	0.657004	0.017239	38.1110	0.0000
Root _Types					Value
Inverted AR Root					0.28
Inverted MA Root 1					0.44
Inverted MA Root 2					-0.19
Statistics					Value
Log-Likelihood					4292.061
Akaike Information Criterion -AIC					-8.288320
Schwarz Information Criterion -AIC					-8.254869
Durbin-Watson Statistic	1.899188				

Source: Author's calculations in Eviews based on the exchange rate dataset.

The estimation results of ARMA (1,2)-GARCH (1,1) model for the exchange-rate return series is presented in Table 6. We set the mean equation as ARMA (1,2), and for heteroscedasticity we use the GARCH (1,1) model for variance equation to account for time-varying volatility. In the mean model, the constant is negative and statistically significant at 1% level $p = 0.0052$. For the dynamic terms, only MA (2) is statistically significant $p = 0.0091$ with AR (1) and MA (1) being non-significant at conventional significance levels. This indicates that there is little short-run dependence in the conditional mean of exchange-rate returns. The equation for the variance provides some very strong evidence of conditional heteroscedasticity. The ARCH (1) coefficient (0.3961) as well as the GARCH (1) coefficient 0.6570 are positive and statistically significant $p < 0.01$. The positive ARCH coefficient indicates that current volatility is responsive to recent shocks, and the significant GARCH coefficient implies that volatility depends on its own past values.

4.3 GARCH Conditions

ARCH+GARCH Close to 1 → Finding persistent volatility, less than 1 → dying out very quickly, greater than 1 indicate possible nonstationary variance (as shown below).

$$\alpha + \beta = 0.396131 + 0.657004 = 1.053135$$

The sum of the ARCH and GARCH coefficients is equal to 1.0531, providing strong evidence for high volatility in will persist over time in the exchange-rate return series. The implication of these dependencies is that volatility shocks disappear at a slow pace and periods of high volatility are followed by other high volatility

periods. This behavior accords with the volatility clustering widely observable in financial and exchange-rate data.

4.3 Post-Estimation ARCH-LM Test

Table 7: Post-Estimation ARCH-LM Test

Statistic	Value	Probability
F-statistic	0.184566	0.6676
Obs*R-squared	0.184891	0.6672

Source: Author's calculations in Eviews based on the exchange rate dataset.

We conducted a post-estimation ARCH-LM test on the standardized residuals to see if an estimated GARCH (1,1) model is adequate. The null hypothesis of the ARCH-LM test, described in section 2.4., indicates that no additional conditioned heteroscedasticity or auto correlated disturbances exist within a specified order q (typically $q = 12$ months since we use monthly data throughout this study) beyond what is already captured as part of the residual series. From our results in Table 6, F-statistic = 0.1846 (p-value = 0.6676) and Obs*R-squared statistic=0.1849 (p-value = 0.6672). We cannot reject the null hypothesis since both probabilities are significantly over 5% threshold. the GARCH (1,1) model. Hence, the model successfully explaining conditional heteroscedasticity and volatility clustering in the exchange-rate return series.

4.4 Modelling the Impact of News Events on USD/AFN Exchange Rate Volatility

With volatility clustering and strong evidence of an ARCH effect established for the USD/AFN exchange rate returns, we proceed to assess whether news impacts on exchange rate volatility through time. In seeking to fulfil this aim, data series related to news were added within the ARMA-GARCH structure when analysing the impacts of these on exchange rate changes and volatility. The news dataset was assigned labels belonging to relevant economic themes like Monetary News, Humanitarian Aid Inflows and Suspension, Political, Economic, Migration Related Events. These categories were identified based on their potential influence upon demand and supply of foreign currency, investors' expectations, outlook, trend and economic condition in Afghanistan. A visual inspection of the exchange rate series as well as marking the dates for important news events indicates that episodes of heightened exchange rate volatility tend to occur in conjunction with major economic and political events. Improvement in humanitarian aid, foreign exchange inflows and central bank interventions on that front are examples of good news that can support the Afghani by raising the availability of foreign currency and increasing confidence in the market. On the other side, negative news regarding aid suspension, declined international assistance, uncertain political development or poor economic report may but higher volatility at

exchange rate that allows to depreciate of Afghani vs. dollar currency. Thus, news variables were included in the mean and variance equations of the ARMA-GARCH model.

4.5 Correlation Analysis of News Variables

Table 8. Correlation Matrix of News Variables

Variables	Economic	Migra	Monetar	Political	Aid_Sus	Aid_Inflo
ECONOMIC	1					
MIGRATION	0.001116	1				
MONETARY	-0.002629	0.004556	1.			
POLITICAL	-0.001116	0.001934	-0.004556	1		
AID_SUSP	0.002505	-0.004342	0.010227	0.004342	1.	
AID_INFLOW	-0.001937	0.003357	-0.007907	-0.003357	0.007535	1

Source: Author's calculations based on the compiled news and exchange rate dataset (2023–2026).

Table 8 displays the correlation matrix of the six news categories used in this study. The correlation analysis is used to measure the strength of relationship between explanatory variables and multicollinearity, as a study must be conducted before estimating ARMA-GARCH models. The results show that the correlations between variables relating to news are very small. The strongest positive correlation is between Aid Suspension and Monetary news 0.0056, while the strongest negative correlation is between Aid Inflow and Monetary news -0.0079 . All remaining correlation coefficients are close to zero, ranging of approximately -0.0079 to 0.0056 . These numbers are well below the conventionally used cut-off of 0.70 to identify possible issues with multicollinearity problems. The results indicate that news categories are mostly uncorrelated and each represents a distinct dimension related to the USD/AFN exchange rate market, improves the reliability of the estimated coefficients and facilitates the identifying of the individual impact of each news category on the exchange rate returns and volatility.

4.6 Impact of News on Exchange Rate Returns in mean equation and Volatility in variance equation

To investigate the impact of news events on USD/AFN exchange rate returns, an augmented ARMA (1,2) model is estimated. The model incorporates both contemporaneous and lagged news variables to capture the possibility that exchange rate markets may show reaction immediately to new information or adjust gradually over days of trading. The estimated mean equation is specified as:

$$r_t = \alpha + \phi_1 r_{t-1} + \phi_1 \varepsilon_{t-1} + \theta_2 \varepsilon_{t-2} + \beta_1 AidInflow_t + \beta_2 Economic_t + \beta_3 Political_t + \beta_4 Migration_t + \beta_5 Monetary_t + \beta_6 AidSuspension_t + \varepsilon_t$$

- r_t = daily return of the USD/AFN exchange rate at time t ;

- α = constant term;
- ϕ_1 = autoregressive coefficient measuring the effect of the previous day's exchange-rate return on the current return;
- ϕ_1 and θ_2 = moving-average coefficients capturing the influence of shocks occurring one and two periods earlier, respectively;
- $AidInflow_t$, $Economic_t$, $Political_t$, $Migration_t$, $Monetary_t$ and $AidSuspension_t$ represent the contemporaneous news variables that capture the immediate effect on exchange rate returns.
- ε_t is the error term.

The coefficients β_1 to β_6 measure the direction and magnitude of the impact of each news category on daily exchange rate movements. ε_t show the random error term, which captures the influence of other factors not explicitly included in the model. The statistical significance and signs of the estimated coefficients provide evidence regarding the extent to which various categories of news contribute to short term fluctuations in USD/AFN exchange rate returns.

Variance Equation:

$$h_t = \omega + \alpha \varepsilon_{t-1}^2 + \beta h_{t-1} + \gamma_1 AidInflow_t + \gamma_2 Economic_t + \gamma_3 Political_t + \gamma_4 Migration_t + \gamma_5 Monetary_t + \gamma_6 AidSuspension_t$$

The conditional variance equation is identified as a GARCH (1,1) model with exogenous news variables. The model investigates whether news categories influence the volatility of USD/AFN exchange-rate returns.

Where:

- h_t = conditional variance of exchange-rate returns at time ttt;
- ω = constant term in the variance equation;
- α = ARCH coefficient measuring the impact of previous-period shocks ε_{t-1}^2 on current volatility;
- β = GARCH coefficient measuring the persistence of past volatility h_{t-1} ;
- $AidInflow_t$, $Economic_t$, $Political_t$, $Migration_t$, $Monetary_t$, $AidSuspension_t$ represent the contemporaneous news variables included as explanatory factors in the variance equation;
- $\gamma_1 \gamma_2 \gamma_3 \gamma_4 \gamma_5 \gamma_6$ = coefficients measuring the impact of news category on exchange-rate volatility.

In the variance equation the inclusion of news variables enables the model to assess whether specific news events contribute to increasing or decreasing exchange-rate volatility. A statistically significant coefficient (γ_i) shows that the corresponding news category exerts a measurable influence on the conditional volatility of the USD/AFN exchange rate. Using this ARMA (1,2)-GARCH (1,1) framework entails the joint modelling of

conditional mean as well as variance for USD/AFN exchange-rate returns. The mean equation allows the direct impact of news on exchange-rate returns while the variance equation assesses the effect of news on exchange-rate volatility. Finally, Lagged Monetary and Aid Suspension variables were added to capture lagging market reactions. The empirical results suggested that while contemporaneous news variables explained exchange-rate volatility, the majority of lagged terms were not statistically significant nor did they improve model performance. Then, excludes lagged values of the news variables to only keep contemporaneous relations.

Table 9: ARMA (1,2) Mean Equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000334	0.000163	-2.052404	0.0404
AID_INFLOW	-0.001000	0.002309	-0.432933	0.6652
ECONOMIC	0.001817	0.002310	0.786732	0.4316
POLITICAL	0.000776	0.003990	0.194554	0.8458
MIGRATION	0.003552	0.003992	0.889681	0.3738
MONETARY	-0.002749	0.001711	-1.607149	0.1083
AID_SUSPENSION	-0.005169	0.001730	-2.987359	0.0029
AR (1)	0.354561	0.225937	1.569293	0.1169
MA (1)	-0.274660	0.223984	-1.226251	0.2204
MA (2)	-0.143447	0.032203	-4.454450	0.0000
R-squared	0.032255	Mean dependent var		-0.000318
Adjusted R-squared	0.023749	S.D. dependent var		0.005762
S.E. of regression	0.005693	Akaike info criterion		-7.489602
Sum squared resid	0.033186	Schwarz criterion		-7.441815
Log likelihood	3882.124	Hannan-Quinn criter.		-7.471469
F-statistic	3.792196	Durbin Watson stat		1.997593
Prob (F-stat)	0.0000101			
Inverted AR Roots		.35		
Inverted MA Roots	.54		-.27	

Source: Author's calculations based on the compiled news and exchange rate dataset (2023–2026).

Table 9 reports the estimation results of the ARMA (1,2) mean equation augmented with the selected news types. The objective of this model is to evaluate whether news events have a direct impact on daily USD/AFN exchange-rate returns while controlling for the autoregressive and moving average dynamics of the return series. As indicated by the F-statistic of 3.792 and its associated probability value of 0.0001 the overall model is

statistically significant. Out of the news dummy variables only Aid Suspension type has a significant statistical impact on exchange-rate returns. The coefficient of Aid Suspension -0.005169 is negative and statistically significant at the 1% level $p = 0.0029$, denoting that news about suspended or decreased international aid immediately has a negative effect on USD/AFN exchange-rate returns. The coefficients associated with Aid Inflow, Economic, Political, Migration, and Monetary news are statistically insignificant, with p-values exceeding the conventional 5% significance level. Regarding the ARMA components, the MA (2) coefficient is negative and highly significant $p < 0.01$, indicating the presence of short-term moving average dynamics in the return series. However, the AR (1) and MA (1) terms are statistically insignificant, suggesting that the dependence of current returns on their own past values is relatively weak after controlling for news variables. The model explains approximately 3.23% of the variation in exchange-rate returns $R^2 = 0.0323$. Although this explanatory power appears low, it is common in high-frequency financial return models where returns are largely driven by unexpected information and market shocks.

• **Mean Equation Results**

The ARMA (1,2) mean equation results indicate that AR (1) and MA (1) are statistically insignificant, suggesting that current USD/AFN exchange rate returns are not significantly influenced by their immediate past values. But, the MA (2) coefficient is negative and statistically significant at the 1% level, confirming the presence of short run moving average dynamics in the return series. Only Aid Suspension Among the news variables is statistically significant $p = 0.0029$. The constant term is negative and significant at the 5% level, indicating a tiny average depreciation tendency in the exchange rate return series during the period (Table 8).

• **Variance Equation Results**

The ARCH coefficient ($\text{RESID}(-1)^2$) is positive (0.3062), and highly significant $p < 0.01$ — this implies that recent shocks have a substantial impact on the current volatility. Similarly, GARCH coefficient becomes 0.6029 positive, $p < 0.01$ highly significant which indicates volatility comes persistently over time. The sum of the ARCH and GARCH coefficients is: $0.306229 + 0.602945 = 0.9091740$ As the value is close to but less than one, volatility shows a high degree of persistence while remaining mean reverting and stable (table 9).

Table 10: Impact of News Categories on USD/AFN Exchange Rate Volatility: ARMA (1,2)-GARCH (1,1)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.000449	0.000117	-3.845958	0.0001
AR (1)	0.013199	0.435973	0.030274	0.9758
MA (1)	0.071473	0.437205	0.163478	0.8701

MA (2)	-0.066878	0.052612	-1.271156	0.2037
Variance Equation				
C.,	0.0000242	0.0000023	10.75964	0.00000
Reside (-1) ^2	0.306231	0.025375	12.07244	0.00000
GARCH (-1)	0.602945	0.019759	30.51475	0.00000
AID_INFLOW	-0.0000472	0.0000092	-5.136763	0.00000
ECONOM	0.0000864	0.0000004	209.7410	0.00000
POLITIC	-0.0001230	0.0000234	-5.009534	0.00000
MIGRATION	-0.00001410	0.00002380	-0.592662	0.5534
MONETARY	0.00003140	0.00000972	3.226042	0.0013
AID_SUSPen	-0.0004050	0.0001070	-3.821442	0.0001
R-Square	0.015808	Mean dependent variance		-0.000324
Adjusted R-square	0.012942	S.D dependent variance		0.005762
S.E. of regression	0.005724	Akaike info criteria		-8.252673
Sum squared resid	0.033750	Schwarz criterion		-8.190550
Log likelihood	4279.632	Hannan-Quinn criter.		-8.229100
Durbin-Watson stat	2.002928			
Inverted AR Roots	.01			
Inverted MA Roots	.23	-.30		

Source: Author's calculations based on the compiled news and exchange rate dataset (2023–2026)

The results of the ARMA (1,2)-GARCH (1,1) model indicate that several categories of news exert statistically significant effects on USD/AFN exchange-rate volatility. Negative and statistically significant coefficient of Aid Inflow news at the 1% level as $p < 0.01$. Economic news exhibits a positive, big significant effect on volatility $p < 0.01$. Political news is also statistically significant at the 1% level $p < 0.01$ and negatively associated with volatility. In contrast, Migration news is insignificant $p = 0.5534$, informing that migration issues did not exert a measurable influence on exchange-rate volatility. Monetary news has a positive and significant 1% level $p < 0.01$. For Aid Suspension news, we also find that this result is significant at the 1% level ($p < 0.01$). Moreover, the large ARCH and GARCH coefficients $p < 0.01$ also indicate volatility clustering and high persistence of the USD/AFN exchange-rate series (Table 10).

4.7 Asymmetric Impact of Positive and Negative News on USD/AFN Exchange-Rate

To further examine whether favourable and unfavourable news exert different effects on the USD/AFN exchange rate, the two aggregate news indices constructed. The Positive News Index POS_NEWS captures the daily intensity of positive news events across all news categories, while the Negative News Index NEG_NEWS captures the daily intensity of adverse news events. To see their impact on both exchange rate returns and conditional volatility these indices were incorporated into an ARMA (1,2)-GARCH (1,1) framework.

Table 11: Estimation Results of Mean and Variance Equations under GARCH (1,1) Framework with News Asymmetry

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.000268	9.81E-05	-2.726549	0.0064
POS_NEWS	-0.000290	0.000539	-0.537005	0.5913
NEG_NEWS	0.000484	0.001058	0.457802	0.6471
AR (1)	0.227249	0.368033	0.617468	0.5369
MA (1)	-0.185055	0.368339	-0.502405	0.6154
MA (2)	-0.094029	0.032102	-2.929102	0.0034
Variance Equation				
C,.	9.56E-07	8.97E-08	10.65672	0.0000
Reside (-1) ^2	0.384433	0.028910	13.29765	0.0000
GARCH (-1)	0.659242	0.016948	38.89884	0.0000
POS_NEWS	-0.00000020	0.00000225	-0.089204	0.9289
NEG_news	-0.00000629	0.00000039	-16.16201	0.0000
R-square	0.018589	Mean dependent var		-0.000318
Adjusted R-Square	0.013815	S.D. dependent var		0.005762
S.E. of regression	0.005722	Akaike info criterion		-8.292549
Sum squared reside	0.033654	Schwarz criterion		-8.239983
Log likelihood	4298.248	Hannan-Quinn criter.		-8.272603
Durbin-Watson stat	1.925163			
Inverted AR Roots	.23			
Inverted MA Roots	.41	-.23		

Source: Author's calculations based on the compiled news and exchange rate dataset (2023–2026).

• *Mean Equation Results*

The results of the mean equation indicate that neither the Positive News Index nor the Negative News Index has a statistically significant impact on daily USD/AFN exchange rate returns. The coefficient of POS_NEWS is negative but insignificant ($p = 0.5913$), while the coefficient of NEG_NEWS is positive and also insignificant ($p = 0.6471$). These findings suggest that the average daily returns of the exchange rate do not directly influence by positive and negative news. AR (1) and MA (1) are statistically insignificant among the ARMA terms, indicating weak autoregressive and first order moving average effects. However, the MA (2) coefficient is negative and statistically significant at the 1% level $p = 0.0034$, admit the existence of short run moving average dynamics in the return series. The constant term is negative and statistically significant, suggesting a slight average depreciation tendency in the USD/AFN return series during the period of study. (Table 11)

• *Variance Equation Results*

The ARCH coefficient, represented by $\text{RESID}(-1)^2$, is positive and highly significant $p < 0.01$, indicating that recent shocks have a substantial effect on current volatility. Likewise, the GARCH coefficient is positive and highly significant $p < 0.01$, demonstrating the persistence of volatility over time. The persistence of volatility is measured by: $\text{ARCH} + \text{GARCH} = 0.384433 + 0.659242 = 1.043675$ as we see this value is slightly above unity, indicating a very high degree of volatility persistence in the USD/AFN exchange rate market. The Positive News Index is statistically insignificant $p = 0.9289$, indicating that favorable news events do not exert a measurable influence on volatility, while the Negative News Index is highly significant at the 1% level $p < 0.01$.

4.8 Diagnostic Test of the ARMA (1,2)-GARCH (1,1) Model

The aim of this diagnostic test is to determine whether the estimated model adequately captures the conditional heteroskedasticity of the USD/AFN exchange-rate return series. The estimated GARCH model is considered adequate If no ARCH effects remain in the residuals.

Table 12: Post-Estimation ARCH-LM Test for the ARMA (1,2)-GARCH (1,1) Model

Statistic	Value	Probability
F-statistic	1.3997	0.1750
Obs*R-squared	13.9561	0.1750

Source: Author's estimation using EViews.

The F-statistic is 1.3997 with a probability value 0.1750, while the Obs*R-squared statistic is 13.9561 with a corresponding probability value of 0.1750. Since both probability values exceed the conventional 5 percent

significance level, that show no ARCH effects remain in the residuals. This result indicates that the ARMA (1,2)-GARCH (1,1) model has successfully captured the conditional heteroskedasticity present in the USD/AFN exchange-rate return series. Therefore, the estimated model is considered statistically adequate for exchange-rate volatility. (Table 12)

4. 9 DISCUSSION

In general, the results suggest that news information is more influential on exchange rate volatility rather than returns, which suggests that news influences exchange rates primarily by influencing uncertainty and risk perceptions of market participants. This result is similar to that of Avioz et al. (2025), who also discovered a long-run positive correlation between the intensity of news and the volatility of returns on the currency, with the correlation increasing when the economy enters recession, and bad news induces higher volatility. In a similar vein, Glebocki and Saha (2024) provide evidence of the direct rise of exchange-rate volatility, exchange-market pressure, and currency depreciation upon a rise in global economic and financial uncertainty, especially in emerging markets.

In the different categories of news studied in this research, only Aid Suspension news has a significant impact on the returns of the exchange-rate market, which shows the importance of international support for Afghanistan's foreign exchange (FOREX) market. The outcome is significant in the Afghan context in which the shifts in the international financial assistance and aid flows could influence market perception and availability of foreign currency. The findings in this paper are applicable to the context of Afghanistan, but largely in line with Glebocki and Saha (2024) who demonstrate that uncertainty shocks can generate substantial shifts in exchange-rate conditions, especially in emerging and financially vulnerable economies. The result also indicates that information about the aid could have an additional effect beyond being an external financial shock to also serve as a major signal affecting market expectations and exchange-rate dynamics.

The variance equation provides stronger evidence of the effects of news on exchange-rate volatility. Specifically, news about Aid Inflow, Economic, Political, Monetary, and Aid Suspension have significant effects on exchange-rate volatility while news about Migration has no significant effect. These findings indicate that economic, political, monetary and aid-related information has a greater impact on market uncertainty than on the actual exchange rate level. This is in line with Glebocki and Saha (2024) who conclude that uncertainty stemming from economic policy, monetary policy and financial markets is important for exchange-rate volatility. They also suggest that uncertainty shocks can have more powerful effects on exchange rate in emerging economies. Furthermore, Chunga and Yu (2024) find, with the help of GARCH-type models, that

external shocks have the potential to affect the persistence, asymmetry and threshold characteristics of foreign-exchange markets, especially when they are negative.

The large values of the ARCH and GARCH coefficients are a testament to the presence of volatility clustering and persistence in the USD/AFN exchange-rate market. The estimate of the persistence parameter suggests that volatility shocks have a long lasting impact, but the volatility process is stable and mean reverting over time. This is in line with the existing literature on exchange-rate volatility and with Chunga and Yu (2024) who find significant volatility persistence as well as external shocks effects in the Malawian foreign-exchange market. Likewise, Hasanov et al. (2024) illustrate the continued importance of GARCH-based models in exchange-rate volatility modelling and forecasting and argue that structural change models can be used to enhance volatility forecasts. These results suggest that the effects of past shocks and past conditional volatility are important to consider for the current volatility in the USD/AFN market.

The analysis of the asymmetric effects also reveals that there is no statistically significant relation between good news and exchange-rate returns and volatility, but there is a statistically significant relation between bad news and volatility, which increases volatility and causes larger market reactions than good news. The phenomenon of asymmetric response is consistent with what Avioz et al. (2025) find: during economic stress, bad news is associated with increased volatility in currency prices, whereas good news is not. The Ghana data also suggests an asymmetric response, as observed in the present study. Negative news has the greater impact on destabilizing USD/GHS exchange-rate volatility than positive news of equal magnitude according to Akosah (2014). However, more recent evidence from Bangladesh is of contrasting value. This study by Monir et al. (2025) employs an EGARCH model to explore the effect of positive and negative economic news and finds an asymmetric volatility effect in the foreign-exchange market in Bangladesh. Overall, these studies suggest that there is cross-country and cross-market variation in the strength and impact of asymmetric news effects, and that the present study shows that there is greater volatility response to bad news in Afghanistan.

The results are generally in line with the recent empirical work on exchange-rate volatility, both in terms of the importance of news, uncertainty, volatility persistence, and asymmetric reaction to bad news. The study by Avioz et al. (2025) confirms the relevance of news intensity for the analysis of currency volatility, whereas Glebocki and Saha (2024) reveal that uncertainty shocks can lead to significant exchange-rate volatility, especially in emerging markets. Additionally, Chunga and Yu (2024) show that external shocks are crucial in shaping volatility persistence and asymmetry, while Hasanov et al. (2024) offer further evidence on the significance of GARCH models and structural change in exchange-rate volatility. The current paper contributes

to this literature by offering an empirical example and documenting the impact of the different types of news (economic, political, monetary, migration) on the USD/AFN currency pair within a broader investigation of the impact of aid inflows and suspensions in Afghanistan. The results especially highlight the significance of information about aid and negative news in determining fluctuations in the foreign exchange market of Afghanistan.

5. CONCLUSIONS

Applying the ARMA-GARCH method using daily data from January 2023 up to May 2026, This study investigated how news shocks affect USD/AFN exchange-rate returns and volatility in Afghanistan. The results show that the USD/AFN exchange rate is characterized by strong volatility clustering and permanent persistence, which confirms our initial assumptions, conditioning towards past volatility still sustains the future market. Based on the empirical findings, Hypotheses 1, 2, 3, and 5 were accepted, confirming that news shocks significantly affect USD/AFN exchange-rate volatility, negative news has a stronger impact than positive news, volatility persists over time, and the Afghan foreign-exchange market does not fully and immediately reflect publicly available information. Hypothesis 4 was partially accepted, as political and aid-related news significantly influence exchange-rate volatility, but they were not conclusively stronger than all other types of news. The results indicate that news explains a larger proportion of the variance in exchange-rate volatility than it does in exchange-rate returns.

In particular, Aid Suspension, Economic News, Political News and Monetary News acted as leading news-related payloads responsible for exogenous-founded shocks in information with direct implications how information influences market uncertainty and expectations that are themselves capable of driving the volatility of exchange-rates. This analysis provides further evidence that negative news affect volatility more than positive news, consistent with an asymmetric information response by the market. The findings show that the exchange-rate volatility in Afghanistan is sensitive to both types of economic fundamentals and news.

5.1 Suggestions and Recommendations

The high dependence of the Afghan economy on imports, foreign aid and other fiscal flows State Exchange-rate volatility is a major challenge facing the Afghan Economy Conclusions: In summary, the results of this research indicate that news regarding aid-related, economic, political and especially monetary development is a major determinant of USD/AFN exchange-rate volatility. Consequently, ongoing viewing of news and information should be viewed as a key element of exchange-rate administration and economic decision-making in Afghanistan. It also advises the same for further application and analysis in economic field incorporating broader use of volatility modelling techniques, especially ARCH/GARCH models in exchange-rate forecasting,

policy evaluation, and risk management. Such models can provide valuable information for government institutions, central banking authorities, financial organizations, businesses, and researchers seeking to understand and manage exchange rate fluctuations or volatility in Afghanistan.

5.2 Suggestion's for Further Research

1. Future studies should incorporate key macroeconomic variables like inflation, money supply, trade balance and GDP with news-based variables to disentangle the relative effects of volatility.
2. Researchers are encouraged to employ and compare alternative volatility modeling techniques, such as EGARCH, TGARCH, APARCH, and FIGARCH models, for deeper analysis.
3. Future research should utilize longer time series datasets and additional classification of news. Expanding both the study period and the scope of variables would enhance the robustness of findings.

5.3 Conflict of Interest

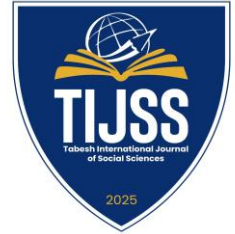
The author declares no conflict of interest.

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