

Association Between Inflation and Price of Assets in the Crisis Period

Naqeeb Ullah ^{1,*}

¹*Department of Business Administration, Asia e University, Malaysia*

Article History

Received: 13 March, 2025 Revised: 20 August, 2025 Accepted: 09 September, 2025 Published: 22 September, 2025

Abstract:

Aim: The study evaluated the association between inflation and Pakistan's asset prices during the crisis. The country's economic condition went through different crises, such as the Global Financial Crisis 2008-09 and COVID-19 from 2019-2020, which also created shifts in the monetary policy. The country's inflation rate increased during the crisis, affecting asset prices. Therefore, considering the crisis periods, this study has been conducted to identify the relationship between inflation and asset prices.

Method: The study was conducted using a quantitative research design with secondary data. The data for inflation, stock price, exchange rate and gold prices were obtained through Trading Economics, OPF, and Investing.com. The data for the crisis period were considered using a dummy variable. The data was collected quarterly from 2012 to 2020. The time series data analysis was conducted using STATA software.

Findings: Based on the results obtained from the ARDL test, the stock prices, exchange rate, and gold prices were significantly related to the inflation rate, considering the crisis interaction. Therefore, it was concluded that the inflation rate and prices of assets are significantly related, considering the economic crisis.

Implications: Hence, policymakers should closely monitor inflation, especially during economic crises, to stabilise asset prices. Adaptive monetary policies and strong financial oversight can help manage the inflation's impact on stocks, gold and exchange rates.

Keywords: Stock prices, gold prices, exchange rate, inflation rate, financial crisis, ARDL test.

1. INTRODUCTION

The recent global crisis has led to a persistent increase in the price level of all commodities. In general terms, inflation is the increase in prices that makes the purchasing value of money decline. Inflation has an evident impact on asset prices and varies according to the country's economic cycle (Cieslak & Pflueger, 2023; Ikeda, 2022; Li *et al.*, 2021). The boom is positive for the country as it provides a greater level of employment and a decline in the overall interest rates and inflation. It becomes appropriate for investors to capitalise money in various business propositions instead of earning interest by keeping it in the banks (Riesthuis *et al.*, 2020). Since the economy is in a state of growth, people tend to earn higher returns on investments. The business opportunities offer employment and greater taxes to the government (Adam & Miller, 2021; Fang, 2024; Fox & Signé, 2021).

The inflation-asset price connection is a vital research domain, especially for economies subject to several crises (Guardia, 2024; Tomé & Ferrández, 2021). This study seeks to find out how inflation influences asset prices during the crisis period in Pakistan. Despite wide-ranging international literature on this issue, such as (Anwar, 2021; and Koivisto, 2024), there remains a gap in country-level analysis, particularly for developing economies such as Pakistan that are also confronted with specific structural issues, policy incoherence, and inflationary pressures fuelled both at home and abroad.

Pakistan offers a strong case because of its politically unstable environment, inflation volatility, and dependence on external funding, all making the prices of assets especially vulnerable to macroeconomic shocks (Ghauri *et al.*, 2024; Irfan *et al.*, 2025; Masih & Irshad, 2024; Rashid *et al.*, 2023). The study on these factors will help investors, policymakers, and financial institutions, as

* Address correspondence to this author at Department of Business Administration, Asia e University, Malaysia;
E-mail: naqeebmangal02@gmail.com



© 2025 Copyright by the Authors.
Licensed as an open access article using a CC BY 4.0 license.



it offers insights into how investment choices and wealth distribution are affected by inflation under various stages of the business cycle. The focus on Pakistan is because of the heightened significance of inflation as an economic uncertainty determinant and direct influence on asset prices (Alvi *et al.*, 2024; Ramzan, 2021). Furthermore, empirical evidence from Pakistan is not plentiful to differentiate the way this relationship changes during a crisis. The originality in this research is in the phase-specific analysis with the help of econometric methods to reflect the asymmetry in the inflation-asset price relationship. By closing this gap, the research enriches academic literature and helps market players and regulators make informed decisions to improve Pakistan's financial stability and economic resilience.

Furthermore, the research is crucial to be conducted at this time, provided the current economic climate of Pakistan is marked by persistent inflationary pressures, political instability, and increased vulnerability to global shocks. Recently, inflation volatility has intensified, influencing investor behaviour and asset valuation more profoundly than before (Ghauri *et al.*, 2024). Furthermore, with continuous shifts in monetary policy and increasing reliance on external funding, understanding the inflation-asset price relationship is important for effective and timely policy responses. Considering the macroeconomic uncertainties, the study provides empirical insights currently required for supporting economic recovery, safeguarding investor confidence and increasing financial stability.

2. LITERATURE REVIEW

(Alzoubi, 2022) studied the effects of macroeconomic determinants—interest rate (IDR), consumer price index (CPI), real GDP (RGDP), and domestic credit to the private sector (DCGDP)—on stock performance in Jordan, employing data from the Amman Stock Exchange and the Central Bank of Jordan. Annual data were applied using the ARDL bounds testing method. Results showed that CPI and IDR exerted substantial negative impacts on the stock market, whereas RGDP had a positive impact; DCGDP was insignificant statistically. The ARDL model was chosen because it can handle small samples and mixed integration levels. Its strengths are its powerful econometric diagnostics and clear long- and short-run distinction. Weaknesses are its single-country focus and lack of consideration of short-run market fluctuations using annual data. The study findings align with the Monetarist theory, indicating that inflation and interest rates adversely affect stock prices (Ogbebor *et al.*, 2021). It supports the view that controlling monetary factors is important to maintain market stability and investor confidence.

(Bengana *et al.*, 2024) examined the nexus between inflation and stock performance in the Gulf Cooperation Council (GCC) nations. With the panel ARDL approach and yearly data, the research established a long-term link between inflation and stock performance, with differences across nations. The regional focus and panel data application are strong points, facilitating increased statistical power and external validity. Weak points are the absence of sectoral analysis and inflation breakdown. (Chiang, 2023) examined the relationship between actual stock returns and inflation in 12 large economies based on inflation uncertainty theories and volatility measures. The research found a robust negative association fueled by volatility due to inflation in equity markets. It has strength in its global applicability and novelty, but is circumscribed in applicability to emerging markets. (Mwiwa & Jagongo, 2025) targeted Kenya's banking industry, testing various inflation types (*e.g.*, cost-push, demand-pull) with quarterly data from 2017–2022 and SPSS for analysis. Their research showed substantial positive impacts of inflation types on banks' stock returns, which were moderated by inflation targeting. Strengths are its specificity and pragmatic policy conclusions; its limitations are its sector specificity and relatively brief data length. The Fisher hypothesis and Monetarist theory primarily support the findings, elaborating on inflation's adverse effect on stock returns. However, inconsistencies across sectors and regions challenge the efficient market hypothesis (EMH), assuming a uniform response to information (Ogbebor *et al.*, 2021). Based on these studies, the following hypothesis has been formed.

H1: Inflation has a significant and positive impact on the stock prices in Pakistan

(Abaidoo & Agyapong, 2024) analysed the role of internationally traded commodity price volatility on inflation and inflation uncertainty in 32 Sub-Saharan African economies between 1996 and 2019. Employing the Two-Step System Generalised Method of Moments (GMM) estimation method, the analysis revealed that forex-adjusted crude oil, gold, and cocoa prices significantly positively impacted inflation. In contrast, cotton prices had a significant adverse effect. Gold, cocoa, and cotton prices were also identified to raise inflation uncertainty. The study also found that regulatory quality and GDP per capita growth lower inflation uncertainty. An important strength of this study is its novel application of forex-adjusted commodity prices at individual country levels, offering a more precise analysis than traditional studies. Further, including moderating variables such as regulatory quality provides policy-relevant information. However, the research is confounded by its temporal coverage since it leaves out other recent shocks like the COVID-19 pandemic, and its results are region-specific, which could limit applicability to other developed or



emerging economies. Monetarist theory prioritises the money supply's role in shaping inflation, but the research puts external commodity price volatility at the forefront. This implies Sub-Saharan African inflation could result from more external shocks than loose money policy, meaning classic monetarist thinking does not adequately counteract inflation dynamics in resource-based, open economies (Ogbebor *et al.*, 2021).

(Garratt & Petrella, 2022) examined the contribution of commodity price data in inflation risk forecasting with a model average method. Their analysis demonstrated that disaggregated commodity price data significantly improved point and density inflation forecasts. The study showed that including commodity prices enhances the ability to anticipate inflation tail events and periods of high price volatility. A strength of this study is its rigorous use of forecast density analysis, which adds value for central banks and policymakers concerned with inflation targeting. However, the research is self-limiting in addressing only more developed economies. It does not clearly elaborate on how its conclusions can be generalised to emerging markets, with potentially different inflation dynamics and data availability. These findings align with the New Keynesian theory, which focuses on the role of expectations and nominal rigidities. The findings suggest that commodity prices can inform short-term inflation risk in volatile periods. However, since New Keynesians prioritise expectation management, the study might overstate the predictive power of backwards-looking price data (Wiegand, 2025).

(Devaguptapu & Dash, 2023) examined the effect of global food and energy inflation on household inflation expectations across a sample of European nations from 1988 to 2020. The authors used multifractal detrended cross-correlation analysis (MF-DCCA) and augmented it with the Autoregressive Distributed Lag (ARDL) model to ensure robustness. They determined that home inflation expectations were positively linked with world energy and food inflation, and the latter's effect increased when volatility was low. As per the rational expectations theory, the findings challenge that individuals fully anticipate future inflation using all available information. Instead, the strong influence of commodity prices indicates that expectations may be more reactive and forward-looking, indicating bounded rationality in household forecasting. The strength of this paper is the application of sophisticated techniques in modelling non-linear and time-varying relationships, coupled with behavioural emphasis on household expectations. However, the study's relevance could be restricted to lower-income or developing economies where inflation expectations tend to be weakly anchored, and credible household-level data could be missing.

(Abaidoo & Agyapong, 2022) examined in another study the impact of commodity price volatility, inflation uncertainty, and macroeconomic instability on political stability in Sub-Saharan Africa based on panel data covering the period from 1996 to 2019. Pooled ordinary least squares with Driscoll and Kraay standard errors was used in the study to take care of cross-sectional dependence. Findings revealed that political instability was affected negatively by crude oil, copper, and coal price volatility, but positively by gold and natural gas price volatility. It further established that regulatory quality moderates such relationships either to increase or depress their effects based on the commodity. One of the main strengths of this paper is its multi-dimensional approach to analysis, connecting economic variables to political results, providing richer insights into macro-political processes. Pooled OLS can conceal country-level effects, and as with all the papers in the dataset, its exclusion of post-2019 data will impact its usability. Hence, it can be hypothesised that;

H2: Inflation has a significant and positive impact on the commodity prices in Pakistan

Economic downturns, such as depressions or recessions, act as a moderating influence on the relationship between asset prices and inflation. In such downturns, characterised by dwindling output, increasing unemployment, and declining consumer demand, the normal dynamics between inflation and asset markets reverse dramatically (Ahmed & Sarkodie, 2021; Georgarakos *et al.*, 2025). Inflation is usually weak during such phases, and sometimes economies outright deflate. With declining corporate profits and economic uncertainty growing, asset prices, equities, and commodities are under pressure to decline (Magubane & Mncayi-Makhanya, 2025).

From a Keynesian economics point of view, which places significant emphasis on aggregate demand and investor sentiment, these crisis periods change how inflation plays with asset prices (Wiegand, 2025). During recessions, slack demand diminishes both profitability and pricing power, such that inflation, if it occurs, will not be demand-driven but could be due to cost-push factors like supply shocks. This type of inflation, combined with declining output, is especially pernicious as it further squeezes corporate profits and investor yields. Asset markets then react negatively as real earnings are undermined and uncertainty rises. Even low inflation during times of crisis is known to have negative consequences (Mishkin & Kiley, 2025). Instead of being a reflection of sound demand, inflation in recessions is seen by most as a danger to purchasing power and real returns, particularly when economic growth is flat or even

declining. Investors grow risk-averse, increasing capital flight from risk assets such as property and shares. This further devalues assets since markets grow increasingly responsive to inflation expectations and volatility.

In addition, the uncertainty of inflation in times of crises further fuels market volatility. Whereas inflation in stable or expanding economies could be indicative of strong demand and profitability, under crises, it has a higher tendency to undermine investor confidence and weaken asset values (Girdzijauskas *et al.*, 2022; Jiménez *et al.*, 2023). Hence, economic crises also serve as intense moderators that can reverse or dampen the conventional direct relationship between inflation and asset prices. Investors and policymakers need to identify this cyclical asymmetry, reflected by Keynesian focus on demand shocks and confidence effects, to understand asset market behaviour and develop proper monetary, fiscal, and investment policies. Therefore, the following hypothesis is developed;

H3: The Crisis period significantly moderates the relationship between asset prices and the inflation rate in Pakistan.

3. METHODOLOGY

The research design adopted for this particular study was quantitative, enabling the researcher to evaluate independent variables and their correlation with dependent variables. (Apuke, 2017) has presented that studies evaluating the association between different variables are more suitable for quantitative analysis. Therefore,

quantitative analysis is more suitable for conducting this study to address this research's objective.

The researcher's data collection technique is secondary sources using various websites such as Trading Economics, OPF, and Investing.com. Based on the constraints of time and accessibility to the data, the researcher considered the sample size using the convenience sampling technique. It requires the collection of data which is easily accessible. Based on this, the sample size in this study is from quarter 1 of 2012 to quarter 4 of 2020. The study proclaims quantitative analysis with variables including the country's exchange rate, inflation rate, gold prices and stock prices every quarter. The data for each variable has been collected from different websites that provide historical data sets of the macroeconomic variables. Table 1 reflects the sources for each variable considered in the study. The study's independent variable is the inflation rate, which is used to check its impact on the dependent variables, such as stock prices and gold prices. The crisis is considered the moderating variable. The control variable here is the exchange rate since it influences inflation and asset prices by affecting import costs, export competitiveness and investor sentiment. Currency depreciation can increase inflation through higher import prices while impacting stock and commodity prices *via* trade balances and capital flows (Akhtar *et al.*, 2022). Hence, controlling for exchange rates ensures a more accurate estimation of inflation-asset relationships.

Table 1. Proxies and sources of the variables.

Variables	Proxy	Sources	References
Independent Variable			
Inflation Rate	Consumer Price Index	Trading Economics	(Yusof <i>et al.</i> , 2021)
Dependent Variables			
Gold Prices	Gold prices in PKR for 10 gm	OPF	(Li & Du, 2024)
Stock Prices	KSE-100 index	Investing.com	(Jadoon <i>et al.</i> , 2024)
Moderating Variable			
Crisis Period	Dummy variable, 1 for the crisis period and zero otherwise	Historical dates	(Li, 2024)
Control Variable			
Exchange Rate	USD/PKR	Investing.com	(Akhtar <i>et al.</i> , 2022)



Due to the quantitative nature of the study, the data were analysed using statistical tools for time series analysis. The software used for the time series analysis is STATA. The Dickey-Fuller unit root test is conducted as the preliminary analysis to indicate the use of ARDL. The null hypothesis of the unit root test specifies the existence of a unit root in the time series data. In contrast, the alternative hypothesis displays stationarity in the time series data (Sreenu, 2022). Based on the outcomes of the unit root tests, the ARDL was estimated to indicate the relationship between the variables of asset prices and the inflation rate. The ARDL model is taken into account within this research because it is capable of adapting to time series data with variables integrated at varying levels, *i.e.*, $I(0)$ and $I(1)$, but not $I(2)$. The initial Dickey-Fuller unit root test indicated a combination of stationary and non-stationary variables, so ARDL was an apt option. Furthermore, ARDL can handle small sample sizes and enable the simultaneous estimation of both short-run and long-run interrelations between asset prices and inflation. Its capacity for including lagged terms also enables one to capture the dynamic nature of the data, resulting in more robust and interpretable empirical findings (Sreenu, 2022). The following is the ARDL equation.

$$\begin{aligned}\Delta G_t &= \beta_0 + \sum \beta_1 \Delta G_{t-1} + \sum \beta_2 \Delta CPI_{t-1} \\ &\quad + \sum \beta_3 \Delta Crisis_{t-1} \\ &\quad + \sum \beta_4 \Delta ER_{t-1} \\ &\quad + \sum \beta_4 \Delta CPI \times Crisis_{t-1} + e_t \\ \Delta SM_t &= \beta_0 + \sum \beta_1 \Delta G_{t-1} + \sum \beta_2 \Delta CPI_{t-1} \\ &\quad + \sum \beta_3 \Delta Crisis_{t-1} \\ &\quad + \sum \beta_4 \Delta ER_{t-1} \\ &\quad + \sum \beta_4 \Delta CPI \times Crisis_{t-1} + e_t\end{aligned}$$

Where;

G = Gold prices

CPI = Inflation Rate

ER = Exchange rate

SM = Stock Market

CPI * Crisis = interaction of crisis term with inflation

e = error term

t = time period

4. RESULTS AND DISCUSSION

4.1. Descriptive Statistics

Table 2 above reflects the descriptive statistics summarising the data regarding each variable. The inflation rate has an identified mean value of 7.06% and a standard deviation of 2%, showing that the average inflation rate from 2012 to 2020 is 7.06% quarterly. Furthermore, the stock price has a mean value of PKR 33061.60 and a standard deviation of PKR 9830.42, which shows the average stock price during the period to be 33061.60. Gold has identified the mean value of PKR 49405.82 with the standard deviation of PKR 5664.72. It shows that the average gold prices during this period are PKR 49,405.82, which can deviate above or below by PKR 5,664.72, which also shows higher volatility of gold prices. The exchange rate has been identified as the mean value of 117.008 USD/PKR with a standard deviation of 24.65. It indicates that the exchange rate has higher volatility as it has an average value of 117.008 USD/PKR and can deviate above or below by 24.65.

4.2. Dickey-Fuller Unit Root Test

Table 3 above shows the Dickey-Fuller unit root test. The null hypothesis of the unit root test indicates the presence of a unit root in the time series data, and the alternative hypothesis shows stationarity in the time series data. Inflation rate, stock price, gold and exchange rate have identified the *P*-value greater than the significance level, which accepts the null hypothesis; hence, the unit root is present in the data. The first difference has a significance level for inflation rate, stock price, gold, and exchange rate, which are 0.00, 0.0395, 0.0407, and 0.00, respectively. Furthermore, stock, exchange, and gold returns have identified a *P*-value of 0.00, indicating that the data is stationary. The ARDL model is approximated based on the outcomes, showing the variables' association.

4.3. Association between Inflation and Stock Prices

The ARDL in Table 4 evidence reveals strong short-run adjustment with the coefficient on lagged stock return (B -1.211, $p < .001$), implying quick recovery from shocks to equilibrium. Long-run coefficients on inflation rate (B = 0.011, p -value= 0.265), crisis (B = 0.057, p -value = 0.691), exchange rate (B = 0.001, p -value = 0.223), and the interaction term (B = 0.017, p -value = 0.469) are all not statistically significant, implying few long-term impacts on stock returns. However, short-run behaviour unveils the significant adverse effects of first and third lagged exchange rate changes on stock returns, showing that volatility in exchange rates negatively influences stock prices in the short run. The impressive R-squared of 0.858 indicates an appropriate model fit. The bounds test supported a stable long-run relationship even though long-run coefficients are insignificant.

Table 2. Descriptive statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
Inflation Rate (%)	36	7.06	2.000	4	11.4
Stock Price (PKR)	36	33061.60	9830.42	13761.76	48155.93
Gold (PKR)	36	49405.82	5664.72	40380	60871
Exchange Rate (USD/PKR)	36	117.008	24.65	90.52	167.2

Table 3. Unit root test.

Variable	Intercept	Significance	First Difference	Significance
Inflation Rate	-1.798	0.381	-5.363	0.000
Stock Price	-1.813	0.374	-1.813	0.039
Gold	-1.798	0.381	-1.798	0.040
Exchange Rate	0.052	0.963	-6.367	0.000
LNSTOCKRET	-7.107	0.000		
LNGOLDRET	-6.38	0.000		
LNEXRET	-6.214	0.000		

4.4. Association between Gold Return and Inflation Rate

The ARDL gold return model in Table 5 evidences a strong short-run correction with a significant negative coefficient on the lagged gold return, suggesting rapid error correction. Long-run findings indicate that inflation, crisis, and exchange rates all significantly lower gold returns. At the same time, the crisis-inflation interaction positively affects returns, which supports that inflation in a crisis may increase gold as a haven. Short-run dynamics report substantial adverse immediate effects of inflation and exchange rate variability on gold returns, but some positive lag effects. The model captures a high variance ($R^2 = 0.927$), and the bounds test confirmed a stable long-run relationship.

5. DISCUSSION

The study aims to identify the relationship between the inflation rate and asset prices, considering different asset

prices such as stock prices and gold prices, amid a crisis period. The study has adopted the time series data analysis and the ARDL technique to indicate the relationship between the variables. The analysis has identified that the inflation rate is significantly related to stock and gold returns amid a crisis. The findings are consistent with the findings of different studies conducted previously. The research findings, that inflation substantially impacts stock returns, gold prices, and exchange rates during economic crisis periods, accord with and contrast with prior literature in significant terms. Like (Alzoubi, 2022), the present research confirms a strong relationship between inflation and stock performance; however, Alzoubi discovered a negative influence on stock markets in Jordan. The existing results for Pakistan show a strong (but not necessarily adverse) correlation in times of crisis. This difference may be due to differences in monetary policy sensitivity and investor attitudes in Pakistan, where inflation tends to be followed by speculation and greater demand for tangible assets such as gold.

Table 4. ARDL for inflation and stock prices.

Stock Return	Coef.	Std. Err.	t	$P > t $
ADJ				
Stock Return				
L1.	-1.211***	0.169	-7.160	0.000
LR				
Inflation Rate	0.011	0.010	1.150	0.265
Crisis	0.057	0.142	0.400	0.691
Exchange Rate	0.001	0.001	1.250	0.223
Crisis×CPI	-0.017	0.023	-0.740	0.469
SR				
Exchange rate				
D1.	-0.011***	0.003	-3.480	0.002
LD.	-0.005	0.004	-1.400	0.177
L2D.	0.000	0.004	0.070	0.942
L3D.	-0.009**	0.004	-2.460	0.023
constant	-0.136	0.130	-1.050	0.304
R-Square	0.858			
Adjusted R-Square	0.797			
Bound Test Statistic	Value			
F-statistic	11.25***			
t-statistic	-7.158***			

Note: *** indicates significance at 1%, ** indicates significance at 5%, * indicates significance at 10%

In line with (Chiang, 2023; and Mwiwa & Jagongo, 2025), the research corroborates the view that inflation is responsible for asset price changes, particularly in turbulent times. (Mwiwa & Jagongo, 2025) realised positive impacts of various forms of inflation on banking stocks in Kenya. This may reflect the Pakistan market experience during inflationary periods, where the investor hedges against inflation using stock markets and currency markets, particularly during economic depression. The research findings on gold and exchange rates resonate with those from (Abaidoo & Agyapong, 2024), which showed the inflationary effect of commodities traded internationally. In Pakistan, gold is a conventional hedge against inflation, and exchange rate volatility tends to be

driven by imported inflation from energy and food reliance.

The deviation from some earlier research, *e.g.*, negative or non-significant relationships in stable, advanced economies (*e.g.*, Garratt & Petrella, 2022), is accounted for by structural and macroeconomic heterogeneity. Pakistan's relatively high inflation volatility, diminished investor confidence, less robust institutional arrangements, and external weaknesses heighten asset market sensitivity during economic stress. These regional determinants highlight the more robust and multiplicative inflation-asset price connections identified in the study, especially in the crisis period.



Table 5. ARDL model for gold return and inflation rate.

Gold Return	Coef.	Std. Err.	t	$P > t $
ADJ				
Gold Return				
L1.	-1.728***	0.173	-10.000	0.000
LR				
Inflation Rate	-0.014***	0.004	-3.110	0.008
Crisis	-0.358***	0.117	-3.050	0.009
Exchange Rate	-0.003***	0.001	-4.770	0.000
Crisis*CPI	0.072***	0.020	3.560	0.003
SR				
Inflation Rate				
D1.	-0.065***	0.020	-3.280	0.006
LD.	-0.017	0.014	-1.150	0.270
L2D.	-0.011	0.016	-0.730	0.480
L3D.	0.117***	0.022	5.310	0.000
Crisis				
D1.	-0.072	0.180	-0.400	0.697
LD.	0.573***	0.180	3.190	0.007
Exchange Rate				
D1.	-0.007**	0.003	-2.590	0.023
LD.	0.004	0.002	1.770	0.101
L2D.	0.009**	0.003	2.940	0.012
L3D.	0.009**	0.004	2.380	0.033
Crisis*CPI				
D1.	-0.003	0.026	-0.110	0.914
LD.	-0.095***	0.027	-3.490	0.004
Constant	0.616***	0.131	4.710	0.000
R-Square	0.927			
Adjusted R-Square	0.834			
Bound Test Statistic	Value			
F-statistic	7.856***			
t-statistic	-5.379***			

Note: *** indicates significance at 1%, ** indicates significance at 5%, * indicates significance at 10%

CONCLUSION AND RECOMMENDATIONS

This research aimed to comprehend the relationship between inflation and asset prices in the crisis period. The research uses the secondary method as a data collection technique, and the study's premise is quantitative. The time series data analysis has been conducted using STATA software. Considering the crisis interaction, the study's findings illustrate that the stock prices, exchange rate, and gold prices are significantly related to the inflation rate. It can also be established that the inflation rate and prices of assets are significantly related, considering the crisis period.

Since Pakistan has been involved in an inflationary spiral, it has become more necessary for the government to alter policies to control inflation. Since Pakistan has been a major importer, the price fluctuation embellishes the existing inflation and has transformed it into a double-digit inflation rate. The government can intervene in curtailing inflation through contractionary monetary policy by reducing the money supply in an economy. It reduces the supply of money in the economy and hence the spending. The retraction of supply increases demand, and the value of money upsurges and stabilises in the long run.

Although the findings of this research highlighted the association of inflation and asset prices in the crisis period, some limitations restricted the scope of the study. This includes the sample size incorporated; more years of data can be included in the study to provide more extensive results. Furthermore, other asset classes can be used to enhance the findings on the association between asset prices and inflation. The restricted scope of one country provides limited findings. The future studies can also incorporate the different regions for enhanced findings on the crisis period.

POLICY IMPLICATIONS

The findings of this study are significant in terms of policy relevance for Pakistan's economic stability and financial markets. Considering the enormous influence of inflation on stock returns, gold prices, and exchange rates during times of crisis, policymakers need to prioritise effective management of inflation to stabilise asset markets and ensure investor confidence. Monetary officials must pursue active policies, like inflation targeting and active interest rate management, to contain inflation volatility and avoid destabilising asset price swings. Enhanced regulatory environments can limit market uncertainty and enhance transparency, supporting long-run investment. In light of gold being used as a

hedge, exchange rate stabilising policies and intervention in imported inflation from energy and food-related sectors are essential to minimise external shocks. In addition, custom-made crisis communication policies could contain inflationary expectations, thereby preventing panic selling of assets. In general, simultaneous fiscal and monetary policies and effective financial market regulation are necessary to increase resilience in Pakistan's asset markets in the face of inflationary pressure, particularly during economic downturns.

AVAILABILITY OF DATA AND MATERIALS

The data will be made available on reasonable request by contacting the corresponding author.

FINDING

None.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

ACKNOWLEDGEMENTS

Declared None.

REFERENCES

- Abaidoo, R. & Agyapong, E.K., (2022). Commodity price volatility, inflation uncertainty and political stability. *International Review of Economics*, 69(3), pp.351-381. <https://doi.org/10.1007/s12232-022-00395-3>.
- Abaidoo, R. & Agyapong, E.K., (2024). Commodity prices, inflation and inflation uncertainty among emerging economies. *Journal of Economic and Administrative Sciences*, 40(3), pp.622-640. <https://doi.org/10.1108/JEAS-10-2021-0203>.
- Adam, S. & Miller, H., (2021). *Taxing work and investment across legal forms: Pathways to well-designed taxes* (No. R184). IFS Report. [doi:10.1920/re.ifs.2021.0184](https://doi.org/10.1920/re.ifs.2021.0184).
- Ahmed, M.Y. & Sarkodie, S.A., (2021). The COVID-19 pandemic and economic policy uncertainty regimes affect commodity market volatility. *Resources policy*, 74, p.102303. <https://doi.org/10.1016/j.resourpol.2021.102303>.

- Akhtar, S., Ramzan, M., Shah, S., Ahmad, I., Khan, M.I., Ahmad, S., El-Affendi, M.A. & Qureshi, H., (2022). Forecasting the exchange rate of Pakistan using time series analysis. *Mathematical Problems in Engineering*, 2022(1), p.9108580. <https://doi.org/10.1155/2022/9108580>.
- Alvi, A.R., Gillani, S.M.A.H., Rana, M. & Ali, A., (2024). Impact of institutional quality and macroeconomic variables on the stock market in Pakistan. *Journal of Management Info*, 11(3), pp.309-323. <https://doi.org/10.31580/jmi.v11i3.3157>.
- Alzoubi, M., (2022). Stock market performance: Reaction to interest rates and inflation rates. *Banks and Bank Systems*, 17(2), p.189. [http://dx.doi.org/10.21511/bbs.17\(2\).2022.16](http://dx.doi.org/10.21511/bbs.17(2).2022.16).
- Anwar, C.J., (2021). Heterogeneity effect of central bank independence on asset prices: Evidence from selected developing countries. *Heterogeneity Effect of Central Bank Independence on Asset Prices: Evidence from Selected Developing Countries*, 55(2), pp.65-80. <https://eprints.untirta.ac.id/4942/>.
- Apuke, O.D., (2017). Quantitative research methods: a synopsis approach. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, 6(11), pp.40-47. <https://j.arabianjbmr.com/index.php/kcajbmr/article/view/1003>.
- Bengana, I., Mili, K., Alnefaie, A.H., Khababa, N. & Mehaouat, L., (2024). The Impact of Inflation on the Performance of Stock Markets in the Gulf Cooperation Council Countries. *Journal of Ecohumanism*, 3(6), pp.347-354. <https://www.cceol.com/search/article-detail?id=1274289>.
- Chiang, T.C., (2023). Real stock market returns and inflation: Evidence from uncertainty hypotheses. *Finance Research Letters*, 53, p.103606. <https://doi.org/10.1016/j.frl.2022.103606>.
- Cieslak, A. & Pflueger, C., (2023). Inflation and asset returns. *Annual Review of Financial Economics*, 15(1), pp.433-448. <https://doi.org/10.1146/annurev-financial-110921-104726>.
- Devaguptapu, A. & Dash, P., (2023). Global commodity prices and inflation expectations. *International Journal of Emerging Markets*, 18(5), pp.1053-1077. <https://doi.org/10.1108/IJOEM-11-2020-1382>.
- Fang, W., (2024). Negative Impact of Income Tax on Economic Growth. In *SHS Web of Conferences* (Vol. 188, p. 02003). EDP Sciences. <https://doi.org/10.1051/shsconf/202418802003>.
- Fox, L. & Signé, L., (2021). The fourth industrial revolution (4IR) and the future of work: Could this bring good jobs to Africa? *Evid. Synth. Pap. Ser.*, 51. <https://includeplatform.net/wp-content/uploads/2021/06/The-fourth-industrial-revolution-4IR-and-the-future-of-work.pdf>.
- Garratt, A. & Petrella, I., (2022). Commodity prices and inflation risk. *Journal of Applied Econometrics*, 37(2), pp.392-414. <https://doi.org/10.1002/jae.2868>.
- Georgarakos, D., Kim, K.H., Coibion, O., Shim, M., Lee, M.A., Gorodnichenko, Y., Kenny, G., Han, S. & Weber, M., (2025). *How costly are business cycle volatility and inflation? A vox populi approach* (No. w33476). National Bureau of Economic Research. <https://www.nber.org/papers/w33476>.
- Ghauri, S.P., Ahmed, R.R., Streimikiene, D., Qadir, H. & Hayat, A., (2024). Macroeconomic factors driving exchange rate volatility and economic sustainability: Case study of Pakistan. *Amfiteatru economic.*, 26(66), pp.612-628. <https://www.cceol.com/search/article-detail?id=1244558>.
- Girdzijauskas, S., Streimikiene, D., Griesiene, I., Mikalauskiene, A. & Kyriakopoulos, G.L., (2022). A new approach to inflation phenomena is needed to ensure sustainable economic growth. *Sustainability*, 14(1), p.518. <https://doi.org/10.3390/su14010518>.
- Guardia C., P., (2024). Dynamics of asset prices during economic crises. <https://ddd.uab.cat/record/301575>.
- Ikeda, D., (2022). Monetary policy, inflation, and rational asset price bubbles. *Journal of Money, Credit and Banking*, 54(6), pp.1569-1603. <https://doi.org/10.1111/jmcb.12880>.



- Irfan, M., Salman, M. & Saleem, S., (2025). Dynamic Interplay: Evaluating Fiscal and Monetary Policies in Shaping Pakistan's Macroeconomic Landscape. *Advance Journal of Econometrics and Finance*, 3(2), pp.143-165. <https://doi.org/10.63075/gn7nqf68>.
- Jadoon, A.K., Mahmood, T., Sarwar, A., Javaid, M.F. & Iqbal, M., (2024). Prediction of Stock Market Movement Using Long Short-Term Memory (LSTM) Artificial Neural Network: Analysis of KSE 100 Index. *Pakistan Journal of Life & Social Sciences*, 22(1). https://pjlss.edu.pk/pdf_files/2024_1/107-119.pdf.
- Jiménez, G., Kuvshinov, D., Peydró, J.L. & Richter, B., (2023). Monetary policy, inflation, and crises: history and administrative data evidence. *Inflation, and Crises: Evidence From History and Administrative Data (June 6, 2023)*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4304896.
- Koivisto, T. (2024). Asset price shocks and inflation in the Finnish economy. <https://urn.fi/URN:NBN:fi-fe2024061955575>.
- Li, B., (2024). Testing Business Cycle Theories: Evidence from the Great Recession. *arXiv preprint arXiv:2403.04104*. <https://doi.org/10.48550/arXiv.2403.04104>.
- Li, H., Zheng, Y., Han, Y.L., Cai, S. & Guo, M., (2021). Nonlinear elasticity of biological basement membrane revealed by rapid inflation and deflation. *Proceedings of the National Academy of Sciences*, 118(11). <https://doi.org/10.1073/pnas.2022422118>.
- Li, Y. & Du, Q., (2024). Oil price volatility and gold prices volatility asymmetric links with natural resources via financial market fluctuations: Implications for green recovery. *Resources Policy*, 88, p.104279. <https://doi.org/10.1016/j.resourpol.2023.104279>.
- Magubane, K. & Mncayi-Makhanya, P., (2025). The dynamic influence of the global financial cycle: synchronisation and impact on South Africa's financial cycle. *Cogent Economics & Finance*, 13(1), p.2451051. <https://doi.org/10.1080/23322039.2025.2451051>.
- Masih, Z. & Irshad, H., (2024). Economic Determinants of Stock Market Volatility in Pakistan: Exploring the Moderating Impact of Political Stability. *iRASD Journal of Economics*, 6(3), pp.838-850. <https://doi.org/10.52131/joe.2024.0603.0243>.
- Mishkin, F.S. & Kiley, M., (2025). *The Evolution of Inflation Targeting from the 1990s to the 2020s: Developments and Challenges* (No. w33585). National Bureau of Economic Research. <https://www.nber.org/papers/w33585>.
- Mwiwa, J.K. & Jagongo, A., (2025). Impact of Inflation on Stock Market Returns: Evidence from Banking Stocks of Nairobi Securities Exchange, Kenya. *Asian Journal of Economics, Finance and Management*, 7(1), pp.214-227. <https://doi.org/10.56557/ajefm/2025/v7i1268>.
- Ogbebor, P. I., Adesola, A., Nathaniel, O., & Gregory, O. (2021). Stock returns, inflation and interest rate in Nigeria. *Journal of Economics and International Finance*, 13(3), 106-116. <https://doi.org/10.5897/JEIF2020.1107>.
- Ramzan, M., (2021). Symmetric impact of exchange rate volatility on foreign direct investment in Pakistan: do the global financial crises and political regimes matter? *Annals of Financial Economics*, 16(04), p.2250007. <https://doi.org/10.1142/S2010495222500075>.
- Rashid, A., Jehan, Z. & Kanval, N., (2023). External shocks, stock market volatility, and macroeconomic performance: An empirical evidence from Pakistan. *Journal of Economic Cooperation & Development*, 44(2), pp.1-26. https://www.researchgate.net/profile/Nazish-Kanval/publication/383789069_External_Shocks_Stock_Market_Volatility_and_Macroeconomic_Performance_An_Empirical_Evidence_from_Pakistan/links/66d9f5afbd20173667b94a79/External-Shocks-Stock-Market-Volatility-and-Macroeconomic-Performance-An-Empirical-Evidence-from-Pakistan.pdf.
- Riesthuis, P., Otgaar, H., Mangiulli, I. & de Tauzia, R., (2020). Adopting a fictitious autobiography: fabrication inflation or deflation? *Memory*, 28(6), pp.741-752. <https://doi.org/10.1080/09658211.2020.1771371>.



- Sreenu, N., (2022). Impact of FDI, crude oil price and economic growth on CO2 emission in India: symmetric and asymmetric analysis through ARDL and non-linear ARDL approach. *Environmental Science and Pollution Research*, 29(28), pp.42452-42465. <https://doi.org/10.1007/s11356-022-19597-x>.
- Tomé, J.P.M. & Ferrández, M.F.N., (2021). Profit rates and asset-price inflation in the Spanish economy. *Revista Galega de Economía*, 30(4), pp.1-21. <https://revistas.usc.gal/index.php/rge/article/view/7273>.
- Wiegand, C., (2025). The effect of fiscal policy shocks on asset prices. *Available at SSRN 5269517*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5269517.
- Yusof, N., Nin, L.F., Kamal, H.K.M., Taslim, J.R.A. & Zainoddin, A.I., (2021). Factors that influence the inflation rate in Malaysia. *International journal of academic research in business and social sciences*, 11(9), pp.626-637. <http://dx.doi.org/10.6007/IJARBS/v11-i9/10838>.