Monetary Policy, Interest Rates and Financial Stability in a High-Inflation Environment

Nasir Munir[1], Amir Mustafa[2], Sadia Safdar[3] and Azra Khan[4]

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Abstract

This paper examines the intricate relationship between monetary policy, interest rates, and financial stability in the context of high inflation. This research examines the interaction of interest rate adjustments, inflationary pressures, exchange rate volatility, and macroprudential measures on banking sector resilience, utilizing a panel dataset of 20 nations (10 advanced and 10 emerging) from 2010 to 2022. Utilizing a System GMM framework, financial stability is represented by non-performing loans, bank Z-scores, and liquidity coverage ratios. Findings indicate that whereas interest rate increases alleviate inflation, they concurrently elevate systemic financial risks by augmenting loan defaults, diminishing liquidity, and undermining bank stability, especially in emerging markets. In contrast, macroprudential regulations substantially enhance financial resilience, alleviating the detrimental impacts of inflation and interest rate fluctuations. The results underscore the intrinsic policy trade-off between price stability and financial stability, indicating that a cohesive policy approach—harmonizing interest rate management with specific macroprudential instruments—provides a more durable framework. These insights provide practical recommendations for central banks to address inflationary pressures while maintaining the integrity of the banking sector.

Keywords: Monetary Policy, Interest Rate, Financial Stability.

Introduction

In recent years, global economies have experienced an increase in inflation rates, forcing policymakers, especially central banks, to balance the need to control inflation to maintain balance of payment stability (IMF, 2022). Wherever inflation rates rise, especially in more developed countries, traditional monetary policies —such as changes in interest rates —serve the purpose of fighting inflation and maintaining and stabilizing the financial markets. However, realistic measures of these types of shocks pose a more complicated and less specific picture in high-inflation circumstances. Policy tightening through interest rate increases, although it helps manage inflation, can stretch the financial system and pose some risks to banking systems, credit expansion, and economic growth (Borio, 2019). Confronted with this dual task, central banks are presented with a difficult, if not unprecedented, set of circumstances – hence the interest in exploring how monetary policy affects financial stability in price-inflation environments.

The interaction between monetary policy and its levers, including interest-rate-sensitive financial stability, is most pronounced during periods of high inflation. On the one hand, there

[1]*Assistant Professor, SZABIST University, Islamabad. Email: Nasir.numl786@gmail.com*
[2]*Assistant Professor, Department of Economics, NUML, Islamabad. Email: armustafa@numl.edu.pk*
[3]*Assistant Professor, Department of Economics, Federal Urdu University of Arts, Science and Technology, Islamabad. Email: sadia.safdar@fuuast.edu.pk*
[4]*Assistant Professor, Department of Economics, Federal Urdu University of Arts, Science and Technology, Islamabad. Email: azrakhan@fuuast.edu.pk*

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can be an attraction of foreign capital and stabilization of exchange rates and inflation by lowering demand through increased interest rates (Blanchard, 2021). On the other hand, high rate increases may lead to higher demand for loans, which in turn pushes up the rates of loan default and can result in institution-wide liquidity shortages (Adrian & Liang, 2018). The recent economic crisis in Turkey illustrates this dilemma: while rates increased to an unprecedented level, the central bank raised rates to support the Turkish lira, while at the same time exerting pressure on the domestic banking sector and increasing risks for financial institutions as they did so (Alper & Güler, 2021). These examples raise additional concerns and suggest that central banks should consider trade-offs more thoroughly, seeking alternative measures that may help them achieve trade stability without exacerbating financial situations.

In the past, central banks have used interest rates to influence inflation; however, policy mechanisms must be adaptable in high-inflation circumstances. Recent papers have revealed that when inflation rates climb beyond specific levels, conventional monetary management tools may be limited, and even changes in interest rates in response to inflation and financial stability may return less effectively (Cecchetti & Schoenholtz, 2021). For example, a package of significantly elevated interest rates can provoke a "financial supply shock," meaning that the elevated price of capital reduces the investment rate, slows down lending, and limits the stability of the financial sector. Furthermore, higher interest rates lead to lower asset values and reduced market liquidity, increased exposure to financial shocks, and diminished financial stability (Claessens et al., 2021). These dynamics are most worrisome in EMs because the financial systems are weaker and more vulnerable to external shocks. Inflation's effects can be much more devastating for real economies and households.

They have also noted that emerging markets have been most vulnerable to inflationary pressures because, structurally, the economies within these markets are prone to profound inflationary shocks (IMF, 2022). The problem is that in these economies, inflation can quickly erode purchasing power and, consequently, the stability of the social environment. Consequently, the role of central banks in these contexts is doubly challenging: they must adopt policies that curb inflation while maintaining sound financial systems. Some recent studies have been based on new policy measures, including targeted credit facilities and macro-prudential policies aimed at enhancing the country's financial structures without a rigid focus on interest rates (Akinci & Olmstead-Rumsey, 2018). These tools allow central banks to fine-tune the instruments of monetary regulation so that they can be more responsive to the requirements of their banking members and other lending institutions in maintaining financial stability, rather than forcing themselves into an ill-advised monetary contraction through interest rate increases, which have the effects of dragging down the entire economy.

This paper aims to critically examine the roles of monetary policy, interest rates, and financial stability in high-inflationary economies, encompassing both developed and developing nations. More precisely, this study assesses the effect of conventional fiscal tools, primarily the interest rate, on the stability of the financial system when inflation is high. With the help of case studies from Turkey, Argentina, and Brazil, this work aims to identify trends that will help moderate instability through the use of other policy levers, that is, macro-prudential measures and selective funding accommodations, which may afford CBs more ways of managing those conflicting objectives.

Our research will have dependent variables, including non-performing loan (NPL) ratios, liquidity coverage ratios, and interbank lending rates. In contrast, the independent variables will include changes in the central bank's interest rates, inflation rates, and specific macroprudential measures. Therefore, this study analyzes data from various high-inflation environments to provide practical evidence in support of the established hypothesis, aiding central banks in their implementation of solutions. The authors expect that the findings extend the existing literature and help understand the specific circumstances under which increasing

or decreasing interest rates are beneficial or detrimental to financial stability, as well as why other non-interest-based mechanisms are crucial for maintaining stable economic states.

On balance, the reinvention of inflation poses a sharp challenge for the world's central banks, especially those in developing nations where their monetary systems are more vulnerable to inflation shocks. This research aims to address the existing knowledge gap on how economic policies can sustainably manage inflation and secure financial stability in high-inflation settings. The implications of this study's results will be valuable to policymakers seeking to support safer forms of monetary intermediation and promote sustainable economic development.

Literature Review

To understand the policy requirements of modernization and loosening monetary control, the relationship between monetary policy, interest rates, and financial stability in an era with high and unstable inflation rates has become significant for decision-makers. The roles of central banks in the global financial landscape have shifted following the 2008-2009 crises, leading to a further examination of how interest rate changes impact financial stability and how these systems operate in high-inflation environments. This paper synthesizes the current knowledge regarding the subject, focusing on significant contributions in the literature, empirical data, and shifting paradigms from 2010 to the present.

After the financial crisis, researchers dealt with unconventional monetary policies, including quantitative easing and zero-lower-bound interest rates. Borio and Zhu (2012) described a new 'risk-taking channel' that said that low interest rates for more extended periods fuel market participants' risk-taking. This study provided early evidence that the type of risk monetary policy might pose to financial stability is that low rates could contribute to asset bubbles and higher leverage ratios, especially during periods of high inflation. Borio and Zhu, for example, brought into focus the reality that central banks must juggle various considerations, a discovery that has influenced subsequent studies.

Taylor (2013) reviewed the monetary policy and its impact on the financial stability of advanced economies, observing that policy rules, such as the Taylor rule, had negative implications for financial sector stability, potentially leading to more chaos. Taylor writes that the expansive policies adopted during the crisis made risk mispricing and excessive asset prices possible. Although this research was primarily confined to developed economies, it unearthed powerful insights into high inflation, as many emerging economies also experience high inflation, and asset price inflation feeds off each other.

With the stabilization of global inflation rates, the focus of research shifted towards the effects of changes in interest rates on financial stability in various economic environments. In their fundamental paper dealing with the transmission of interest rate changes from advanced countries to emerging ones, Bruno and Shin (2015) showed that low interest rate policies in SCEs cause credit booms and raise risks in EMEs. They established the global integration of financial systems. They ramped up the rates, considering how inflation-sensitive mature economies can provoke volatile flows and exchange rates in emerging economies.

Adrian and Liang (2016) consider the goals of monetary policy, financial stability, and price stability, arguing that conventional monetary policy instruments, such as raising interest rates, may be inadequate to maintain financial stability in the presence of inflationary pressures. They recommended macroprudential tools as alternatives to interest rates, including countercyclical capital controls and lending constraints based on loan-to-value ratios, which help contain inflation in financial markets. Policymakers learned from this study that the purist monetary policy approach may not be enough to tackle financial stability threats in a high-inflationary environment.

To address this, Kaminska and Roberts-Sklar (2017) responded to the debate by examining how inflation targeting affects financial sector stability. They concluded that, of the twenty-five countries studied, those with central banks that had a clear inflation target framework were better at managing financial stability. However, the study pointed out that inflation targeting may have costs associated with it, and that these costs may be inherent to the strategy, especially when inflation rates are high; raising interest rates to mere levels below inflation may severely impact financial systems and decrease the economic growth rate. Exchange rates that can be changed, adjusted, and adjusted to market conditions are preferable, as seen in the Kaminska and Roberts-Sklar.

Cecchetti and Schoenholtz (2018) have explained the positive correlation between inflation and asset price volatility, reasoning that high inflation tends to increase the risk of fluctuations in asset prices, contributing to risk within or between financial markets. Based on their forecasts, they discovered that inflation relief through interest rate changes in high-inflation eras could curb the inflation threat and topple asset markets, given the high leverage prevalent in many economies. This study was one of the first to investigate the impact of inflation on asset markets, a topic that previous theoretical literature had previously documented as having detrimental effects. It thus helped fill the knowledge gap about the difficulties central banks seem to face in such conditions.\

On this premise, Olmstead-Rumsey and Akinci (2018) examined how macroprudential policies could mitigate the risks associated with high inflation in finance. In their study, they find that using data from emerging markets, countries that utilize macroprudential tools, such as capital and loan restrictions, experience reduced financial volatility when the inflation rate is high. Akinci and Olmstead-Rumsey stated that macroprudential measures should be used in conjunction with interest rates, as they enable central banks to directly control specific financial risks without resorting to general and potentially damaging economic rate increases.

In the global context, Claessens et al. (2019) examined the impact of monetary policy on financial stability, showing that the interest rate sensitivity of credit growth differs across regions and financial systems when inflation is high. Their analysis emphasized that laureates are obsessed with high inflation, weakening conventional instruments for addressing monetary policy issues within the developing synthetic financial markets. Claessens et al. cited that high-inflation emerging markets must, therefore, integrate interest rate policies and selective regulations for stability into the ever-expanding literature on cautious monetary policies.

Given relatively high inflation rates in the global economy after 2020, many recent works have shifted their emphasis toward identifying and forming monetary policy strategies for high-inflation environments. In a high-inflation environment, Blanchard (2021) noted that higher interest rate policies are ineffective and potentially dangerous to domestic financial markets, especially in countries with a substantial debt burden. According to Blanchard, his tips on inflation rate mean that the central banks in such countries should insist on both changes in rate and amounts of money balances.

Building upon this view, Borio et al. (2021) focused on the central banking of high-inflation emerging-market economies. They questioned how policy shifts affect the financial system and its defense mechanisms. In the case of Brazil, Turkey, and Argentina, the study found that rate hikes stabilized the currencies but placed significant pressure on banks and consumers. In the pacifying approach, Borio et al. stressed the need for flexible environment policies that are amenable to inflationary pressures and do not overly rely on rate increases, while embracing realistic policies with regulatory measures that can be tailored to the specific conditions of the economy.

More recently, Adrian et al. (2022) examined the costs and benefits of inflation targeting, including the impact on banking system vulnerabilities of higher interest rates. Their research found that significant rate adjustments may lead to higher opt-out risks and lower liquidity

levels in institutions, particularly in the developing world. Adrian et al. also suggested that central banks should pay more attention to financial stability by incorporating it into their monetary policy tools; this approach will allow for avoiding sudden shifts in inflation that negatively impact the financial sector.

Lastly, Fernandez and Gopinath (2023) focused more on how high inflation and its corresponding monetary policy impacted the entire world's financial system, particularly by stressing the impact of inflationary pressures on external financing and exchange rate stability. They also discovered that inflation destabilizes emerging markets and causes capital flight, ultimately leading to depreciation of the local currency. Ernst and Muhammad Gopinath suggested using these tools in conjunction with interest rates to stabilize central banks' systems without undermining economic growth. This paper contributes to the existing literature on controlling high inflation by complementing a detailed analysis of the necessary monetary policy measures and lending weight to the emerging paradigm of the synergy between economic and macroprudential policies.

Research Gaps and Future Directions

Nonetheless, a few gaps are observed in the body of literature regarding the relationship between monetary policy, interest rates, and financial stability in a high-inflation environment. First, most published works provide little clarity on the following question: how can central banks manage inflation differently while simultaneously enhancing financial stability in the context of continued inflation? However, more work is still required to evaluate the relative usefulness of other instruments, including macroprudential measures and restrictions on capital flows, to break high inflation-related financial volatility. Closing these gaps could help establish a more comprehensive perspective on how the central bank can meet inflation targets and strengthen the economic system.

Data Collection and Sources

The model requires data from various sources to ensure accurate and reliable findings:

Table 1: Variable details

Variable	Type	Measurement	Source
Financial Stability	Dependent	NPL Ratio, Bank Z-Score, LCR	World Bank, IMF, BIS
Interest Rate	Independent	Central bank policy rate (annual)	World Bank, national central banks
Inflation Rate	Independent	Annual CPI growth rate	IMF, World Bank
Exchange Rate Volatility	Independent	Std. deviation of monthly exchange rate changes	IMF, national central banks
GDP Growth Rate	Independent	Annual GDP growth (%)	World Bank, OECD
Macroprudential Policies	Independent	Macroprudential policy index	IMF Macroprudential Policy Database, BIS

The analysis uses a panel dataset covering 20 countries (10 advanced and 10 emerging economies) over the period 2010–2022, reflecting high-inflation environments. The dependent variable is Financial Stability, proxied by the Non-Performing Loan (NPL) Ratio, Bank Z-Score, and Liquidity Coverage Ratio (LCR). Independent variables include:

Interest Rate: Central bank policy rate (annual%).

Inflation Rate: Annual CPI growth rate (%).

Exchange Rate Volatility: Standard deviation of monthly exchange rate changes.

GDP Growth Rate: Annual GDP growth (%).
Macroprudential Policy Index: Intensity of macroprudential measures (e.g., countercyclical capital buffers, loan-to-value ratios).

Econometric Model

$$FS_{it} = \alpha_0 + FS_{it-1} + \beta_1 IR_{it} + \beta_2 INF_{it} + \beta_3 ERV_{it} + \beta_4 GDP_{it} + \beta_5 MPI_{it} + \mu_{it} + +\lambda_t + €_{it}$$

Where:

FS_{it} = Financial Stability indicator (either NPL Ratio, Bank Z-Score, or LCR) for country *i* in year *t*
FS_{it-1} = Lagged financial stability indicator
IR_{it}= Interest rate (central bank policy rate)
INF_{it} = Inflation rate (annual CPI growth)
ERV_{it}= Exchange rate volatility
GDP_{it}= GDP growth rate
MPI_{it}= Macroprudential Policy Index
μ_{it}= Country-specific fixed effects
λ_t= Time-specific effects
$€_{it}$= Error term

Methodology

To address potential endogeneity and dynamic relationships, the analysis employs the System Generalized Method of Moments (GMM), as recommended by Arellano and Bover (1995) and Blundell and Bond (1998). This approach is suitable for panel data with potential reverse causality between financial stability and interest rates. Additionally, the following tests are conducted:

Levin-Lin-Chu Unit Root Test

The Levin-Lin-Chu (LLC) test assesses the stationarity of variables to ensure no spurious regression. A significant test statistic ($p < 0.05$) indicates that the variable is stationary.

Table 2: Unit root test

Variable	Test Statistic	p-value	Conclusion
NPL Ratio	-5.231	0.000	Stationary
Bank Z-Score	-4.987	0.001	Stationary
Liquidity Coverage Ratio (LCR)	-6.012	0.000	Stationary
Interest Rate	-4.765	0.008	Stationary
Inflation Rate	-5.432	0.050	Stationary
Exchange Rate Volatility	-4.891	0.000	Stationary
GDP Growth Rate	-5.678	0.009	Stationary
Macroprudential Policy Index	-4.543	0.006	Stationary

Notes: The LLC test assumes a common unit root process across countries. All variables reject the null hypothesis of a unit root ($p < 0.05$), confirming stationarity.

Jarque-Bera Test

The Jarque-Bera test evaluates the normality of residuals in the GMM models for each dependent variable (NPL Ratio, Bank Z-Score, LCR). A non-significant p-value ($p > 0.05$) indicates normal residuals.

Table 3: Jarque Bera test

Model (Dependent Variable)	Test Statistic	p-value	Conclusion
NPL Ratio (Model 1)	2.341	0.310	Residuals Normal
Bank Z-Score (Model 2)	2.876	0.237	Residuals Normal
Liquidity Coverage Ratio (Model 3)	2.112	0.348	Residuals Normal

Notes: The Jarque-Bera test fails to reject the null hypothesis of normality ($p > 0.05$) for all models, confirming that residuals are normally distributed.

Hansen Test

The Hansen test assesses the validity of instruments in the System GMM estimation. A non-significant p-value ($p > 0.05$) indicates valid instruments with no over-identification.

Table 4: Hansen test

Model (Dependent Variable)	Hansen Statistic	p-value	Conclusion
NPL Ratio (Model 1)	18.456	0.214	Instruments Valid
Bank Z-Score (Model 2)	17.892	0.231	Instruments Valid
Liquidity Coverage Ratio (Model 3)	19.123	0.198	Instruments Valid

Notes: The Hansen test fails to reject the null hypothesis of valid instruments ($p > 0.05$) for all models, confirming no over-identification issues

Arellano-Bond Test

The Arellano-Bond test checks for autocorrelation in the first-differenced residuals. The null hypothesis is no autocorrelation. A significant AR(1) ($p < 0.05$) is expected due to differencing, but a non-significant AR(2) ($p > 0.05$) confirms no second-order autocorrelation.

Table 5: Arellano Bond Test

Model (Dependent Variable)	Test Type	Test Statistic	p-value	Conclusion
NPL Ratio (Model 1)	AR(1)	-2.876	0.004	First-order autocorrelation
NPL Ratio (Model 1)	AR(2)	-1.342	0.183	No second-order autocorrelation
Bank Z-Score (Model 2)	AR(1)	-2.945	0.003	First-order autocorrelation
Bank Z-Score (Model 2)	AR(2)	-1.289	0.201	No second-order autocorrelation
Liquidity Coverage Ratio (Model 3)	AR(1)	-2.789	0.005	First-order autocorrelation
Liquidity Coverage Ratio (Model 3)	AR(2)	-1.356	0.176	No second-order autocorrelation

Notes: AR(1) is significant as expected in GMM, but AR(2) is non-significant ($p > 0.05$), confirming no second-order autocorrelation and supporting model specification.

The system GMM estimation results for the three financial stability measures are presented below:

Table 6: System GMM Results

Variable	NPL Ratio (Model 1)	Bank Z-Score (Model 2)	LCR (Model 3)
Lagged Dependent Variable	0.421*** (0.032)	0.512*** (0.041)	0.398*** (0.029)
Interest Rate	0.183** (0.074)	-0.154** (0.062)	-0.209*** (0.055)
Inflation Rate	0.247*** (0.081)	-0.192*** (0.067)	-0.231** (0.092)
Exchange Rate Volatility	0.134* (0.069)	-0.108* (0.058)	-0.147** (0.063)
GDP Growth Rate	-0.092* (0.048)	0.126** (0.053)	0.178*** (0.046)
Macroprudential Policy Index	-0.165*** (0.051)	0.141*** (0.045)	0.203*** (0.039)
Constant	1.234*** (0.312)	2.156*** (0.401)	1.987*** (0.367)
Observations	260	260	260
Countries	20	20	20
Hansen Test (p-value)	0.214	0.231	0.198
AR(2) Test (p-value)	0.183	0.201	0.176

Notes: Standard errors in parentheses. ***p < 0.01, **p < 0.05, *p < 0.10

Interpretation of Results

The significant positive coefficients for the lagged dependent variables across all models indicate strong persistence in financial stability indicators. This aligns with hysteresis in economic systems, where past levels of financial stability (or instability) influence current outcomes. For instance, a high NPL Ratio in the previous period increases the likelihood of elevated NPLs in the current period, reflecting a slow adjustment in banking sector risk (Adrian & Liang, 2018). The persistence is particularly pronounced for Bank Z-Score (0.512), suggesting that bank stability is highly path-dependent, possibly due to structural rigidities in capital adequacy and risk management practices. This finding supports the financial accelerator theory (Bernanke et al., 1999), which posits that financial conditions amplify economic shocks, perpetuating instability over time.

The positive coefficient for NPL Ratio suggests that higher interest rates increase non-performing loans, consistent with the monetary policy transmission mechanism through the credit channel. Higher interest rates raise borrowing costs, reducing borrowers' ability to service debt, particularly in high-inflation environments where real incomes are eroded (Adrian & Liang, 2018). This is especially relevant in emerging markets, as seen in Turkey's experience, where aggressive rate hikes to stabilize the lira increased loan defaults (Alper & Güler, 2021).

In their turn, negative coefficients of Bank Z-Score and LCR indicate that increasing interest rates decrease the stability and liquidity of banks. This conforms to the risk-taking mechanism of monetary policy (Borio & Zhu, 2012), in which a tightening of policy raises the prices paid by financial institutions to obtain finance, leading to pressure on liquidity and a decrease in capital buffers. The more dominant impact on LCR (-0.209, $p < 0.01$) indicates the susceptibility of banks to liquidity shocks in a high-inflation environment, as elevated rates reduce banks' willingness to lend and lead to increased withdrawals of deposits (Claessens et al., 2021). These conclusions highlight the dilemma between the rate-rising actions of central banks, which create a balance between the need to reduce inflation and the risk of destabilizing the financial system, especially in emerging economies where banking frameworks are weaker.

The beneficial impact on the NPL Ratio means that with greater inflation, larger amounts of loans will default, as inflation erodes real incomes and purchasing power, making repayment of the loans more difficult. This follows the Fisher effect, where a high level of inflation promotes the nominal interest rates that enhance the costs of borrowing and the risk of default (Cecchetti & Schoenholtz, 2021). The negative signs of the Bank Z-Score and LCR imply that inflation triggers the weakening of bank stability and liquidity, as it activates uncertainty and fluctuations in asset prices, thereby decreasing the capital adequacy of banks and limiting the

assets in their holdings (Claessens et al., 2021). The findings are especially applicable to emerging markets, as inflation shocks become more significant due to structural weaknesses, according to the IMF (2022).

The results lead to the inflation-financial stability trade-off, where high inflation, in addition to putting pressure on price stability, destabilizes the financial sector. Such a twofold task makes the tasks of central banks more complicated, as aggressive anti-inflation actions can intensify financial weak points (Blanchard, 2021). The beneficial impact on the NPL Ratio indicates that the volatility of the exchange rate raises the rates of loan default, especially in emerging economies, which have a high proportion of foreign currency-denominated debt. This conforms to the fact that, according to the Mundell-Fleming model, an open economy that experiences fluctuation in the exchange rate is likely to increase the financial risks through a balance sheet effect (Bruno & Shin, 2015). For example, when a currency depreciates, it increases the level of foreign debt in domestic terms, thereby making it more prone to default.

The adverse impacts on the Bank Z-Score and LCR indicate that volatility in the exchange rate weakens both the stability of banks and their liquidity, as it enhances uncertainty and volatility in capital movements, particularly in emerging economies (Fernandez & Gopinath, 2023). These results indicate the international integration of financial markets, whereby external shocks, including the tightening of U.S. monetary policy, can upset emerging economies through the exchange rate mechanism (Bruno & Shin, 2015). The negative coefficient value of the NPL Ratio indicates that an increase in GDP growth decreases loan defaults, and the higher the GDP growth, the better borrowers' ability to repay loans is due to the theory of loanable funds (Blanchard, 2021). The high rates of economic growth raise the incomes of households and firms, mitigating financial suffering.

The Bank Z-Score and LCR are positively contributed to by the coefficients, indicating that GDP growth promotes the stability and liquidity of banks. Increase in economic growth enhances the capacity of the banks to make profits and to accumulate capital, which increases the Z-Score, but also enhances liquidity by boosting the inflow of deposits, hence improving the LCR (Claessens et al., 2021). These findings emphasize economic growth as a stabilizing factor for the financial system, especially in high-inflationary situations, where growth can counteract inflationary forces on financial stability. The -1 coefficient of the NPL Ratio indicates that the more effective the macroprudential measures are, the smaller the loan defaults are, due to the weaker increase in developed credit. This is consistent with the macroprudential policy model, which focuses on particular financial risk without the extensive contraction of the economy (Akinci & Olmstead-Rumsey, 2018).

This is evident in the positive coefficients of Bank Z-Score and LCR, indicating the positive effects of macroprudential policies, which enhance bank stability and liquidity by improving capital requirements and establishing a minimum liquidity buffer, thereby reducing their systemic risks (Adrian et al., 2022). These results demonstrate the supplementary value of macroprudential instruments in the high-inflation setting, allowing central banks to address the issue of financial stability without overextending themselves in the area of interest rate increases, which have diminishing impacts (Borio et al., 2021). The presence of a positive influence on the NPL on the one hand and the negative influence on the Bank Z-Score and LCR on the other is an indication of the credit and liquidity channels, as the tighter policy can cause financial institutions to borrow at higher rates and decrease their resilience (Adrian & Liang, 2018). The increase in interest rates worsens economic risks, as it makes funds more expensive and reduces their liquidity, according to Borio and Zhu (2012), especially in high-inflation environments. The influence of exchange rate volatility on financial stability highlights the importance of open-economy processes, which are particularly significant for emerging markets (Bruno & Shin, 2015). The economic stability tenacity indicators (delayed dependent variables) lend support to the notion that monetary tremors reinforce monetary

cycles (Bernanke et al., 1999). Macroprudential policies, in terms of their effectiveness in reducing the number of NPLs and promoting stability, complement monetary policy since they are more focused on specific risks (Akinci & Olmstead-Rumsey, 2018).

Conclusion

The paper presents strong empirical evidence regarding a multidimensional correlation between monetary policy, financial stability, and inflation within high-inflation settings. The analysis, based on a panel of 20 countries from 2010 to 2022, shows that interest rate increases, as a method of curbing inflation, tend to undermine the stability of the financial system, marked by high ratios of non-performing loans, low bank stability, and decreasing liquidity cushions. These impacts are acutely felt in those economies with precarious financial systems, which include those in the emerging economies. On the contrary, macroprudential policy tools have a balancing impact on all three indicators of financial stability. They are also designed to correct specific weaknesses in the system, e.g., excessive credit growth and liquidity mismatches, without provoking the unfortunate set of macroeconomic responses one has come to expect with tight monetary policy.

Its findings contribute to current policy discussions on the best approaches for central banks in high-inflation situations. They suggest that a framework that combines the wise and selective use of interest rates with targeted macroprudential intervention offers a stronger and more contextually attuned approach to achieving both inflation control and financial stability. In short, the study promotes a reconsideration of the monetary policy orthodoxy, particularly in the context of emerging economies. It proposes to integrate macroprudential considerations into the fundamentals of monetary policymaking processes and create a more versatile, comprehensive approach to addressing the multifaceted problem of high inflation in a global economy where states are somewhat interdependent.

Policy Implications

The empirical findings of this study have significant implications for central banks, especially for emerging market economies that face high inflation. The twin challenge of maintaining price stability while protecting the financial system requires a more nuanced policy framework. Interest rate increase is also effective in countering inflation, but it has proven to increase systemic financial risks by growing non-performing loans and weakening bank liquidity and capital base. This highlights the reason why the exclusive use of mainstream policy instruments in high inflation environments is problematic. The findings confirm the strategic role of macroprudential policies as supplementary tools to the monetary policy. In particular, some time- and action-specific measures, such as countercyclical capital buffers, loan-to-value limits, and liquidity-related requirements, can mitigate credit and liquidity risks without the problematic system-wide effects that often accompany irrational rate hikes. These instruments make banks more resilient and help curb financial volatility when inflationary pressures arise in the context of exchange rate instability.

Thus, policymakers should adopt an integrated policy mix, anchoring inflation expectations via prudent interest rate management while concurrently deploying macroprudential frameworks to stabilize the banking sector. This dual approach aligns with evolving central bank mandates that increasingly recognize financial stability as a co-equal objective alongside price stability. In practical terms, institutionalizing macroprudential surveillance units within central banks and strengthening cross-border policy coordination (especially for emerging markets with open capital accounts) are critical steps toward managing the inflation-financial stability nexus in a globally integrated financial environment.

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