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### **Asymmetric Effects in the Risk-Taking Channel of Monetary Policy Transmission in Iraq**

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#### **Abstract**

*This study examines the asymmetrical impacts of monetary policy transmission on the risk-taking channel in Iraq. Monthly data from Jan. 2005 to Dec. 2019 was utilized; the study employs Nonlinear Autoregressive Distributed Lag (NARDL) estimations to analyze the asymmetrical relationship between monetary policy variables (interest rates, cash reserve requirements, and money supply) and risk-taking channel (bank debt). The F-bound test finds no evidence of a long-run relation between monetary policy and banks' risk-taking channel, while the ECM test confirmed the short-run relation. Furthermore, the Wald test results indicated the presence of asymmetric effects of cash reserve requirements and money supply shocks on bank debt. In contrast, interest rate shocks reveal a symmetric impact, meaning monetary policy shocks affect banks' lending channels differently. This study illuminates the complexities of Iraq's banking industry. It provides important implications for policymakers and financial institutions in handling bank debt in developing market situations and the transmission of monetary policy.*

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#### **1. Introduction**

Recently, monetary policy's role in influencing financial institutions' risk-taking behavior has received significant attention among policymakers, economists, and researchers worldwide. The risk tolerance channel of the monetary policy assumes that changes in monetary policy settings can affect the risk appetite of financial institutions, thereby affecting lending behavior, asset prices, and overall economic stability [2]. Understanding the dynamics of this channel is crucial for central banks and policymakers in assessing the effectiveness of monetary policy measures and their

unintended consequences. Modigliani and Miller's theory suggests that in a frictionless market, the value of a firm remains unaffected by capital structure. However, when a swap is offered between external equity and debt financing, an agency problem arises, as bankers may have incentives to misappropriate bank assets. This creates complexities in the composition of banks' balance sheets, as the optimal mix of equity and debt depends on various factors, including the policy environment and the stochastic nature of asset returns. Changes in monetary policy, aimed at stabilizing fluctuations in banks' net worth, may affect their borrowing decisions, affecting their ability to withstand shocks. This dynamic, known as the risk-taking channel in monetary policy, underscores the importance of understanding how monetary policy affects banks' risk-taking behavior and balance sheet dynamics [8].

The risk channel assumes that changes in monetary policy conditions affect financial institutions' appetite for risk, influencing their credit and investment behavior. This channel works through changes in interest rates, liquidity provision, and other monetary policy instruments, which impact banks' tendency to take risks [6]. In Iraq, where the banking industry is evolving in the face of geopolitical problems and structural restrictions, knowing the risk channel is critical for measuring the effectiveness of monetary policy. The presence of asymmetric effects in the risk-taking channel suggests that risk-taking behavior responds differently to monetary policy changes depending on the policy's direction. Banks, for example, may engage in more risk-taking during periods of monetary easing, seeking more significant returns while interest rates are low. Banks may become more risk-averse during monetary tightening and emphasize capital preservation over riskier investments. According to theoretical models, asymmetric impacts may occur due to disparities in risk perceptions, market dynamics, and regulatory responses to monetary policy actions [3].

The risk channel in monetary policy appears to have originated chiefly from studies undertaken in developed economies such as the United States and the Eurozone, where financial markets are highly developed and data is widely available. However, research on this topic is limited to developing market economies, particularly in countries like Iraq, with distinct institutional and economic characteristics. Understanding how monetary policy affects risk-taking behavior in such situations is critical for policymakers to create effective frameworks that promote financial stability and long-term economic growth. This study seeks to fill a gap in the research by investigating Iraq's monetary policy shocks on risk-taking channels. In this study, we seek to answer the central question: Are there asymmetrical effects in the risk-taking channel of monetary policy transmission in Iraq?

## 2. Literature Review

The risk-taking channel of monetary policy transmission has become crucial in economic research due to its impacts on financial stability and the economy. This concept suggests that shifts in monetary policy conditions shape financial institutions' appetite for risk, consequently influencing their decisions regarding lending and investment. Recent studies have placed growing emphasis on exploring the asymmetrical impacts within this framework, where banks' responses to monetary policy alterations differ depending on the direction of the policy changes. De Groot's study investigated the "risk channel" of monetary policy, which examines how it influences the overall riskiness of the financial sector's balance sheets. This study employed a dynamic stochastic general equilibrium (DSGE) model to determine how banks adjust their risk exposure in response to interest rate policy. Banks, in particular, reduce their reliance on debt financing and leverage, which mitigates the impact of monetary policy shocks. This study articulates that banks may be pushed to increase their debt financing and leverage through monetary policy reactions connected to changes in credit spreads, leading to an increase in the financial sector's risk to the actual economy [9]. Dell'Ariccia et al. study examined the effect of monetary policy on risk-taking behavior in the U.S. banking system by utilizing data on banks' internal ratings of business debts from 1997 to 2011. They find that banks tend to take less risk when short-term interest rates increase in their lending

activities. However, this effect is weaker for banks with low capital levels and during times of financial distress. These findings suggest that monetary policy influences the riskiness of banks and has implications for financial stability [4]. Dang and Nguyen investigated how Vietnamese banks adjusted their asset portfolio and financial structure in response to monetary policy changes between 2007 and 2018. Using two econometric models and several monetary policy indicators, the authors conclude that banks boost liquidity and lower financial leverage in response to monetary expansion. Larger banks are more responsive to adjusting leverage, but smaller banks adjust liquidity more aggressively. Lower interest rates boost the net stable funding ratio (NSFR), showing that banks adjust obligations to improve funding stability [11]. Miho et al. study tried to explore the asymmetric influence of monetary policy on commercial bank lending channels in Iraq from 2005 to 2019. They employed a Nonlinear Autoregressive Distributed Lag (NARDL) approach, which verified a nonlinear relation between monetary policies and bank credit. Their findings suggested that policy interest rates and reserve requirements have asymmetric impacts on bank lending channels, emphasizing the need for policymakers to consider these dynamics when implementing monetary policy [1]. Wu et al. study explored how economic uncertainty influences the relationship between monetary policy and bank risk. Analyzing data from around 1100 public banks across 43 economies from 2000 to 2018, the study consistently observed that higher economic uncertainty tends to weaken the "risk-taking channel" of monetary policy. This consists of the idea of the "option value of waiting," suggesting that when faced with economic uncertainty, banks may hold back from adjusting their risk-taking behavior even when monetary policy changes [5]. Bauer et al. study analyzed the risk-taking channel of monetary policy transmission, specifically the influence of unanticipated monetary policy changes on key risk indicators across financial markets. Through event-study analysis of Federal Open Market Committee (FOMC) pronouncements, they discovered that surprise monetary easing causes significant and durable increases in investors' risk appetite, whereas tightening surprises have the reverse effect. These findings emphasize the importance of the risk-taking channel in conveying monetary policy effects to financial markets and the overall economy [7].

### 3. Data and Methodology

This study used the NARDL approach developed by Shin et al. (2014). The research uses this model to examine asymmetric effects in Iraq's monetary policy transmission risk-taking channel. They are using monthly data from January 2005 to December 2019. The statistics were obtained from the Central Bank of Iraq (CBI) and other public sources. Monetary policy indicators that were utilized in the study were the policy interest rate (PIR), the cash reserve requirement (CRR), and the broad money supply (M2). Banks' Debts (BDebt) are used to measure risk-taking. Also, several control variables are used, including inflation (INF), stock market returns (M.R.), and a dummy variable (DUM) that accounts for the time when the Terrorist organization (ISIS) crisis was in Iraq from June 2014 to December 2017. The Following is the fundamental econometric model:

$$BDebt_t = \beta_0 + \beta_1 MP_t + \beta_2 Inf_t + \beta_3 MR_t + DUM + \mu \quad (1)$$

The model includes banks' debts (BDebt<sub>t</sub>) as the dependent variable and monetary policy indicators (MP<sub>t</sub>), inflation (Inf<sub>t</sub>), stock market returns (MR<sub>t</sub>), and a dummy variable (DUM) representing the ISIS crisis as independent variables. Coefficients ( $\beta_0, \beta_1, \beta_2, \beta_3$ ) estimate the effects of these variables on banks' debts, with an error term ( $\mu$ ) accounting for unobserved factors. Here, we break down monetary policy into its positive and negative aspects using this approach, which enables us to conclude the integration ordering of the variables:

$$BDebt^+ = \sum_{i=1}^t \Delta BDebt_i^+ = \sum_{i=1}^t \text{Max} (\Delta BDebt_i, 0) \quad (2)$$

$$BDebt^- = \sum_{i=1}^t \Delta BDebt_i^- = \sum_{i=1}^t \text{Min} (\Delta BDebt_i, 0) \quad (3)$$

In the absence of a constant term, the asymmetric long-run relationship can be expressed as:

$$BDebt_t = B_1^+ M.P.t^+ + B_1^- M.P.t^- + B_2 Inf_t + B_3 MR_t + u_t \quad (4)$$

Two scalar variables,  $BDebt_t$  for banks and  $M.P.t^+$  for money, are defined as I(1) variables. According to Granger and Yoon's (2002) extension, the model's positive and negative components may be cointegrated. To allow for the possibility of a stationary variable  $Z_t$ , the following specification for asymmetric cointegration is generated by Schorderet (2003):

$$Z_t = B_0^+ BDebt_t^+ + B_0^- BDebt_t^- + B_1^+ M.P.t^+ + B_1^- M.P.t^- + B_2 Inf_t + B_3 MR_t \quad (5)$$

Where  $BDebt_t^+$  and  $M.P.t^+$  have asymptotic cointegration. Symmetric cointegration occurs when  $B_0^+ = B_0^-$  and  $B_1^+ = B_1^-$ . According to Shin et al. (2014), the Linear ECM can be extended to a general NARDL-ECM as follows:

$$\begin{aligned} \Delta BDebt_t = & \alpha_0 + \rho BDebt_{t-1} + \theta^+ M.P.t_{-1}^+ \\ & + \theta^- M.P.t_{-1}^- + \sum_{j=1}^{p-1} \gamma_j \Delta BDebt_{t-j} + \sum_{j=0}^{q-1} (\varphi_j^+ \Delta M.P.t_{-j}^+ + \varphi_j^- \Delta M.P.t_{-j}^-) \\ & + \sum_{j=0}^{q-1} (\varphi_j \Delta Inf_t) + \sum_{j=0}^{q-1} (\varphi_j \Delta MR_t) + DUM + \varepsilon_t \end{aligned} \quad (6)$$

$$\begin{aligned} \Delta BDebt_t = & \alpha_0 + \rho \zeta_{t-1} + \sum_{j=1}^{p-1} \gamma_j \Delta BDebt_{t-j} + \sum_{j=0}^{q-1} (\varphi_j^+ \Delta M.P.t_{-j}^+ + \varphi_j^- \Delta M.P.t_{-j}^-) \\ & + \sum_{j=0}^{q-1} (\varphi_j \Delta Inf_t) + \sum_{j=0}^{q-1} (\varphi_j \Delta MR_t) + DUM + \varepsilon_t \end{aligned} \quad (7)$$

Where  $\zeta_{t-1} = \beta D_t - \beta^- M.P.t^-$ ;  $\beta^+ = -\theta^+/\rho$ ; and  $\beta^- = -\theta^-/\rho$

This technique implies that shocks to monetary policy rates capture monetary policy attitude. Hence, this study employs the NARDL-ECM methodology to assess the presence of asymmetric long-run cointegration. One of the primary goals of this research is to determine what happens to bank debt as monetary policy indicators rise or fall. For details on the technique, see [12] To assess this effect, the study constructs dynamic asymmetric (or nonlinear) multipliers:

$$the m_h^+ = \sum_{j=0}^h \frac{\partial BDebt_{t+j}}{\partial M.P.t^+} \text{ and } m_h^- = \sum_{j=0}^h \frac{\partial BDebt_{t+j}}{\partial M.P.t^-}, \text{ Where } h=0, 1, 2, 3 \quad (8)$$

Equation (8) defines multipliers for the long-run coefficients converge computed by  $-\theta^+/\rho$ : and  $-\theta^-/\rho$ .

## 4. Results of the study

### 4.1. Unit root tests

The research used two tests to decide if a set of variables was stationary: The Augmented Dickey-Fuller (ADF) and the Kwiatkowski-Phillips-Schmidt-Shin (KPSS). It was essential to determine whether data showing trends needed to be adjusted by taking the first difference or by including time-related factors in the analysis to make it stationary. This was because if variables had an integration order of 2 or higher, the results of statistical tests used to examine long-term relationships might not be realistic. Table (1) shows the results of the ADF and KPSS tests. It

reveals that most variables were not stationary at level, but all became stationary after taking the first difference. This means the variables are related so that their changes can be predicted but do not depend on each other more complexly. Since the investigated variables have a mix of characteristics, it suggests that using (NARDL) approach will be helpful and realistic.

**Table 1:** Unit root tests

Variables	ADF		KPSS		Stationary or not-stationary
	constant	Constant & trend	constant	Constant & trend	
At Level					
BDebt	-1.39	-2.01	0.97	0.15*	not-stationary
CRR_POS	-3.74***	-2.85	0.87	0.17*	not-stationary
CRR_NEG	-1.39	-1.64	1.60	0.31	not-stationary
PIR_POS	-2.67*	-2.47	0.46*	0.18*	not-stationary
PIR_NEG	-2.31	-1.06	1.21	0.31	not-stationary
M2_POS	-2.51	-3.43**	1.72	0.26	not-stationary
M2_NEG	-1.16	-4.54***	1.71	0.22	not-stationary
MR	-13.84***	-13.80***	0.05***	0.05***	Stationary
Inf	-1.56	-1.80	0.90	0.23	not-stationary
at first difference					
DBDebt	-13.07***	-13.07***	0.14***	0.13**	Stationary
DCRR_POS	-12.89	-13.41***	0.09***	0.08***	Stationary
DCRR_NEG	-14.03***	-14.07***	0.18***	0.05***	Stationary
DPIR_POS	-13.49***	-14.20***	0.37**	0.12**	Stationary
DPIR_NEG	-6.76***	-10.77***	0.37**	0.08***	Stationary
DM2_POS	-5.27***	-5.58***	0.14***	0.03***	Stationary
DM2_NEG	-14.15***	-14.51***	0.16***	0.05***	Stationary
DInf	-3.83***	-4.68***	0.20***	0.10***	Stationary

Notice: D denotes the first difference.

\*\*\*denotes a 1% significant level.

\*\*denotes a 5% significant level.

\*denotes a 10% significant level.

#### 4.2. NARDL estimations

The NARDL results, as shown in Table (2), focus on the dynamic relationship between monetary policy variables and bank debt levels in Iraq. These findings provide valuable insights into monetary policy variables' short- and long-term effects on banks' risk-taking. Consistent with the literature, the significant and positive coefficient estimate for lagged banks' debt (BDEBT(-1)) reveals the persistence of debt levels over time, highlighting the cyclical nature of credit demand in Iraq's banking industry. This persistence implies that banks continue to borrow despite changes in monetary policy settings, supporting continuing credit demand. Furthermore, the significant and positive coefficient estimate for positive interest rate shocks (PIR\_POS) aligns with economic theory, as higher interest rates encourage borrowing among enterprises and individuals looking for investment opportunities. However, the significant negative coefficient for adverse reserve requirement shocks (CRR\_NEG) is inconsistent with conventional economic theory. Suggesting the reductions in reserve requirements should stimulate lending activity by increasing the funds available for banks to lend, thereby potentially boosting economic activity. However, a negative coefficient means that reductions in reserve requirements may not impact lending. On the other hand, the pessimistic coefficient estimates for positive reserve requirement shocks (CRR\_POS) are consistent with conventional economic theory, which typically suggests that higher reserve

requirements can help stabilize the banking system by reducing excessive lending and promoting financial stability.

**Table 2:** NARDL estimation results

Variables	Coefficient	Std. Error	T-statistic	Prob.
<b>BDEBT(-1)</b>	0.943544	0.023916	39.45251	0.0000
<b>PIR_NEG</b>	-0.002116	0.007342	-0.288228	0.7735
<b>PIR_POS</b>	0.008741	0.004108	2.127984	0.0348
<b>CRR_NEG</b>	0.058526	0.053184	1.100434	0.2727
<b>CRR_POS</b>	-0.089680	0.037880	-2.367472	0.0190
<b>M2_NEG</b>	-0.014874	0.007624	-1.950970	0.0527
<b>M2_POS</b>	-0.001179	0.008948	-0.131775	0.8953
<b>INF</b>	-0.001675	0.000973	-1.721196	0.0871
<b>MR</b>	-9.01E-05	0.000271	-0.332553	0.7399
<b>DUM</b>	-0.035629	0.018020	-1.977219	0.0497
<b>C</b>	1.139431	0.459574	2.479322	0.0141

#### 4.3. Long run estimation results (F-bound test)

The cointegration test Pesaran et al. [10] is applied to check for a long-term relation between the variables. Based on the calculated (F bound test) value and the critical values provided for this test in (Table 3), the results reject a long-term association between the model's variables. This is because the computed F value is less than the critical values of the upper bound I(1) at all levels. As a result, we cannot analyze the long-term relation between variables and must instead focus on the short-term association.

**Table 3:** F-Bound test

F-statistic value	1.53	
<b>Significant</b>	I(0)	I(1)
<b>%10</b>	1.80	2.80
<b>%5</b>	2.04	2.08
<b>%2.5</b>	2.24	3.35
<b>%1</b>	2.50	3.68

#### 4.4. Short-run estimation results

The results of ECM are shown in Table (4); the negative sign and significant coefficient for the error correction term (-0.05) confirm the short-run relation and indicate that deviations from the long-run equilibrium in bank debt are corrected 5 percent per month (due to the monthly data), reflecting the dynamics of adjustment in the Iraqi banking system. The short-run estimation results provide perceptions of how monetary policy variables influence bank debt. Notably, the statistically significant coefficient for changes in the favorable interest rate (D(PIR\_POS)) suggesting a rise in bank debt in Iraq opposes conventional economic theory. Possible reasons include anticipation of future interest rate hikes, solid economic conditions prompting increased lending, and higher interest rates attracting deposits, thereby enhancing bank liquidity. The negative relationship between changes in the positive money supply (D(M2\_POS)) and bank debts seems contradictory to conventional economic expectations. Typically, an increase in money supply is associated with higher lending activity by banks, leading to an expansion of their liabilities. However, several factors could explain this unexpected finding. It may indicate a scenario where banks are cautious about extending loans despite increased available funds, possibly due to concerns about borrower creditworthiness or prevailing economic conditions. Alternatively, it could reflect a regulatory response aimed at limiting excessive risk-taking by banks in response to monetary policy changes. However, the non-significant coefficients for changes in the other variables' positive and negative shocks indicate that these factors may have limited short-run effects on Iraqi bank debt. This could

indicate that the Iraqi banking system is less susceptible to changes in these monetary policy variables in the short term, possibly due to other structural or institutional factors.

**Table 4:** Short-run results

Variables	Coefficient	Std. Error	T-statistic	Prob
<b>D(PIR_NEG)</b>	-0.010784	0.016634	-0.648304	0.5177
<b>D(PIR_POS)</b>	0.023409	0.011315	2.068803	0.0402
<b>D(CRR_NEG)</b>	0.061591	0.090941	0.677262	0.4992
<b>D(CRR_POS)</b>	0.019060	0.088971	0.214222	0.8306
<b>D(M2_NEG)</b>	-0.012390	0.009271	-1.336349	0.1834
<b>D(M2_POS)</b>	-0.052524	0.030801	-1.705300	0.0901
<b>D(INF)</b>	-0.001525	0.001167	-1.306132	0.1934
<b>D(MR)</b>	-3.15E-05	0.000184	-0.171125	0.8643
<b>D(DUM)</b>	0.005856	0.053607	0.109232	0.9132
<b>CointEq(-1)</b>	-0.056473	0.014703	-3.840833	0.0002

The Wald test results in Table (5) reveal important patterns regarding the impact of monetary policy variables on Iraqi banks' risk-taking behavior. Notably, the analysis shows that the effects are inconsistent across policy factors. The study reveals asymmetrical effects for Reserve Requirements (CRR) and Money Supply (M2), implying that positive and negative shocks to these variables influence banks' risk-taking behavior differently. Changes in lending regulations, liquidity conditions, and bank capital adequacy ratios could all contribute to this disparity. For example, an increase in reserve requirements may limit banks' ability to extend credit, resulting in a decrease in risk-taking during tightening periods, whereas a decrease in reserve requirements or an expansion of the money supply may stimulate lending and encourage risk-taking during easing periods. These findings are consistent with Miho et al.'s study, which discovered an asymmetric effect of monetary policy on banks' lending channels.

The study shows that interest rate (PIR) shocks symmetrically influence Iraq's risk-taking channel. This shows that changes in interest rates affect banks' risk-taking behavior in the same way, regardless of the direction of the shock. The observed symmetry can be attributable to the direct impact of interest rate changes on bank borrowing costs, which affects profitability and risk-taking motivations. However, it is crucial to understand the complicated dynamics of interest rate policy effectiveness, which may vary depending on factors such as financial development and borrower responsiveness to interest rate changes.

**Table 5:** Asymmetric test results

Variables	F-Statistics	Prob.
<b>PIR</b>	1.765336	0.1858
<b>CRR</b>	3.855465	0.0512
<b>M2</b>	4.165761	0.0428

Furthermore, the model's nonlinearity about the dependent variable can be verified by looking at its null hypothesis, which is:

$$H_0 = \frac{\beta^+}{\rho} = \frac{\beta^-}{\rho} \quad (9)$$

The rejection of the null hypothesis for the symmetry between monetary policy shocks and the risk-taking channel means the relationship is asymmetric. This shows that the impact of monetary policy on bank risk-taking in Iraq changes depending on the economic conditions or policy regimes. Potential causes of this asymmetry include business cycle swings, price adjustment rigidities, financial market flaws, and the likelihood of liquidity traps. Furthermore, the Keynesian IS-LM

paradigm contends that monetary policy may be less successful during the recession, contributing to asymmetric impacts on bank risk-taking behavior.

**Table 6:** Wald test

Statistics	Value	Prob.
<b>T</b>	-2.149078	0.0331
<b>F</b>	4.618536	0.0331
$\chi^2$	4.618536	0.0316

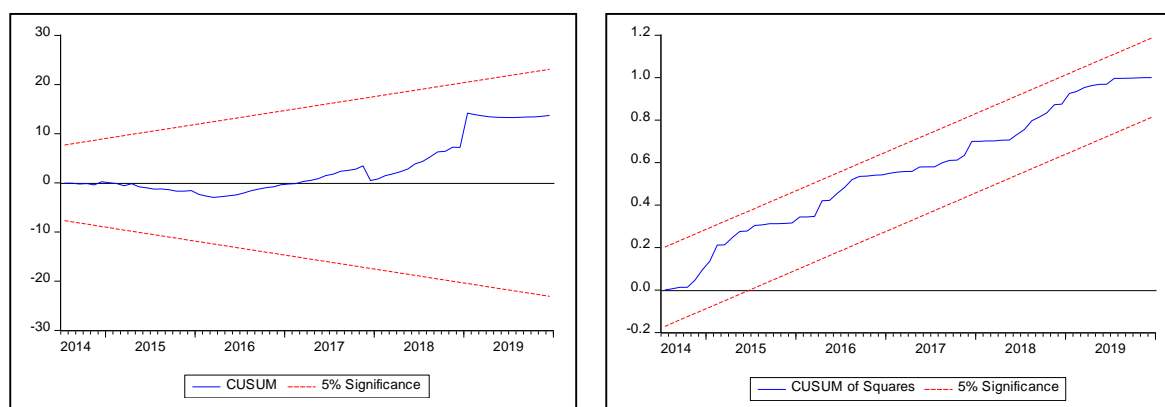
Diagnostic tests like those discussed above are employed to ensure the accuracy of the estimated models. The results of these tests are displayed in Table (7).

**Table 7:** Results of Diagnostic Tests for a Suitable Model

R <sup>2</sup>	F-statistic	Prob.(F)	D.W	ARCH-test	LM-test
0.96	413.64	0.0000	2.05	0.008 (0.97)	0.10 (0.74)

Numbers in the parenthesis are the probability value

According to Table (7), the independent variables have explained the dependent variable by an average of 96%. The F value indicates the meaningfulness of the whole estimated regression. Our estimated regression is significant based on the probability value. The LM-test value is also 0.10, and the D.W. is closer to 2. We do not have autocorrelation because the probability value of this statistic is more significant than the 0.05 level (0.74). The ARCH-test statistic is at 0.008, which has a probability higher than 0.05. meaning there is no heteroscedasticity. In conclusion, we look at the test's stability coefficient, utilized to find the ECM's short-term and long-term stability coefficients for the Debt-dependent variable in the estimated model. Figure (1) shows that the CUSUM and CUSUMQ test statistics fall within the 95% confidence interval and 5% limit, respectively. The null hypothesis is accepted if stability coefficients (structural) do not exist.



**Figure 1:** CUSUM and CUSUMQ test

## 5. Conclusion

The study examined asymmetric effects in the risk-taking channel of monetary policy transmission in Iraq through NARDL estimations. Long-run estimation results (F-bound test) aimed to explore the presence of a long-term relation between the variables of the model. However, the test results rejected a long-term relationship between the variables, as evidenced by the calculated F value being smaller than the critical values of the upper bound I(1) at all levels. Consequently, the study was limited to investigating the short-term relationship between variables. The short-run (ECM) estimation results revealed significant insights into the relationship between various economic variables and bank debt in Iraq.

Notably, the study found that higher interest rates positively impact bank debt, while changes in the positive money supply exhibit a negative relationship with bank debt in the short run. However,

other variables, such as cash reserve requirements and inflation rates, had no significant short-run effects on bank debt. Furthermore, the Wald test results indicated that shocks to cash reserve requirements and money supply asymmetry influenced Iraqi bank debt. In contrast, shocks to interest rates have a symmetric effect. This finding is consistent with previous research indicating different impacts of monetary policy on economic indicators, particularly during recessions. The findings highlight the complexity of the Iraqi economy and the need for a more sophisticated understanding of how monetary policy variables interact with bank debt. These findings have consequences for Iraqi policymakers and financial institutions, emphasizing the need to consider both short- and long-term dynamics when developing monetary policy and banking laws. Furthermore, the study improves the current literature by providing empirical evidence of the asymmetric effects of monetary policy on bank debt in an emerging market context, improving the understanding of monetary policy transmission mechanisms.

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### الآثار غير المتماثلة في قناة المخاطرة لنقل السياسة النقدية في العراق

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#### المستخلص

تبحث هذه الدراسة في التأثيرات غير المتماثلة لانتقال السياسة النقدية على قناة المخاطرة في العراق. تم استخدام البيانات الشهرية من يناير 2005 إلى ديسمبر 2019، حيث تستخدم الدراسة تقديرات الانحدار الذاتي الموزع غير الخطي (NARDL) لتحليل العلاقة غير المتماثلة بين متغيرات السياسة النقدية (أسعار الفائدة، ومتطلبات الاحتياطي النقدي، وعرض النقود) وقناة تحمل المخاطر (ديون البنوك). ولم يجد اختبار  $F$ -bound أي دليل على وجود علاقة طويلة المدى بين السياسة النقدية وقناة المخاطرة لدى البنوك، في حين أكد اختبار  $ECM$  العلاقة على المدى القصير. علاوة على ذلك، أشارت نتائج اختبار والد (Wald) إلى وجود تأثيرات غير متماثلة لمتطلبات الاحتياطي النقدي وصددمات عرض النقود على ديون البنوك، بينما تكشف صدمات أسعار الفائدة عن تأثير متماثل، مما يعني أن صدمات السياسة النقدية تؤثر بشكل مختلف على قناة الإقراض لدى البنوك. تسلط هذه الدراسة الضوء على تعقيدات القطاع المصرفي في العراق وتوفر أثراً مهماً لصانعي السياسات والمؤسسات المالية حول كيفية التعامل مع ديون البنوك في أوضاع السوق النامية وانتقال السياسة النقدية.