International Journal of Social Science and Human Research

ISSN (print): 2644-0679, ISSN (online): 2644-0695

Volume 08 Issue 12 December 2025

DOI: 10.47191/ijsshr/v8-i12-91, Impact factor- 8.007

Page No: 9951-9959

The Study of Vietnam's Monetary Policy Spillovers, Macro-Financial Channels, and Crisis Asymmetries

Bui Duc Ha[1], HuiChen Chiang[2]

[1,2] Ming Chuan University, Taiwan

ABSTRACT: This research examines the asymmetric effects of U.S. monetary policy on Vietnam's sectoral stock returns using monthly data for eleven sectors from 2015 to 2025. Employing fixed-effects panel regressions with clustered standard errors, the study finds that U.S. monetary easing significantly boosts sectoral returns, whereas tightening shows no meaningful impact. In contrast, both SBV rate hikes and cuts negatively affect returns, suggesting domestic monetary signals are interpreted as signs of economic stress.

Key macro-financial variables strongly shape market performance: higher global risk (VIX), exchange-rate depreciation, and inflation depress returns, while oil prices exert a positive effect. No significant sector-level heterogeneity is detected once controls are included. Crisis-interaction models reveal that U.S. monetary easing is particularly effective during COVID-19 but generates weaker or negative effects during the supply-chain crisis and the Russia–Ukraine war, indicating that spillover strength depends on the nature of the shock. The findings highlight the dominance of U.S. policy easing, the limited stimulative role of domestic policy, and the importance of macro-financial stability in an increasingly integrated Vietnamese market.

KEYWORDS: U.S. monetary policy; Vietnam; sectoral returns; asymmetric effects; SBV; macro-financial conditions; crisis interaction.

1. INTRODUCTION

Major central banks such as the U.S. Federal Reserve (Fed) influence financial conditions far beyond their borders. Research shows that when the Fed raises interest rates, emerging markets (EMs) typically suffer noticeable declines in output; these spillovers become more persistent when trade linkages are tight and when there is policy uncertainty. Emerging economies are not passive recipients-responses vary widely across countries and asset classes (Lastauskas & Nguyen, 2024). Vietnam's equity market provides a compelling case. After its first trading session in 2000, it grew from five listed securities and a market capitalization of 0.28 % of GDP to more than 2 100 tradable instruments by mid-2024, with capitalization around 68 % of GDP. Over the past five years the VN Index delivered an annualized 8.5 % return in U.S. dollar terms and exhibited lower correlations with developed markets, making it attractive for global investors. The International Monetary Fund (IMF) projects Vietnam's
economy to expand by about 5.8 % in 2024 and 6.5 % in 2025 (Ngo, 2024). To attract more capital, Vietnam is modernizing its securities infrastructure (such as launching the KRX trading and settlement system in May 2025 and eliminating pre-funding requirements for overseas investors) and easing foreign ownership limits. The government hopes these reforms will help upgrade the market to "secondary emerging" status in global index providers' classifications and potentially unlock billions of dollars of foreign inflows (Bokhari, 2025).

Yet the very openness that draws investors could amplify vulnerability to external shocks. Past Fed tightening episodes have triggered capital outflows, currency depreciation and sharp falls in Vietnam's stock indices, but it is unclear whether the negative effects of rate hikes outweigh the positive effects of rate cuts or which sectors are most sensitive. Existing studies mainly examine aggregate indices or panels of countries; few explore sector-level responses or asymmetric impacts of Fed easing versus tightening. They also often ignore mediating factors such as global risk appetite (VIX), exchange-rate fluctuations, commodity prices or structural breaks like the COVID-19 pandemic and the Russia–Ukraine war.

This study examines how U.S. monetary policy affects Vietnam's sector-level stock returns from May 2015 to June 2025, a period marked by rapid financial expansion and major structural reforms in Vietnam's capital markets. By constructing dummy variables that capture the months following U.S. rate hikes and rate cuts, and by controlling for key global and domestic factors, including the VIX, USD/VND exchange-rate movements, GDP growth, inflation, and changes in gold and oil prices, we aim to isolate the true spillover effects of Fed decisions. Crisis dummies for the COVID-19 pandemic, the global supply- chain/energy shock, and

the Russia–Ukraine war are included to account for structural breaks that could otherwise distort the results. Using panel-data models with sector fixed effects, the study tests three core hypotheses: that Fed tightening has stronger negative effects than the positive effects of easing; that sectors differ in their sensitivity to external shocks depending on characteristics such as financial leverage or export exposure; and that spillovers are amplified or dampened by global volatility, exchange-rate pressures and crisis periods. Overall, the study provides the first systematic evidence on asymmetric monetary spillovers in Vietnam at the sector level, offering insights relevant to policymakers concerned with macro-financial stability, investors seeking better hedging strategies, and scholars examining cross-border transmission of monetary policy in increasingly integrated global markets.

2. LITERATURE REVIEW

2.1 Asymmetric Impact of U.S. Monetary Policy on Vietnam

A substantial body of literature shows that U.S. monetary tightening generates stronger negative spillovers to emerging markets than the positive effects produced by monetary easing. The global financial cycle framework proposed by Miranda- Agrippino and Rey (2020) highlights that U.S. interest-rate increases tighten global financial conditions, reduce risk appetite, and accelerate capital outflows. Engler et al. (2023) and Arteta et al. (2022) further confirm that contractionary U.S. shocks amplify exchange-rate depreciation and market stress in emerging economies.

For Vietnam specifically, empirical observations during the 2022–2023 tightening cycle reported sharp sectoral declines, particularly in real estate, securities, building materials, and finance (Nguyen, 2025). These effects were significantly larger than the gains observed during expansionary phases, reinforcing the asymmetric nature of U.S. monetary spillovers.

The literature strongly supports **Hypothesis 1**: U.S. monetary tightening depresses Vietnamese sectoral stock returns more sharply than U.S. monetary easing supports them.

2.2 Impact of SBV Policy on Sector Returns

Although Vietnam is highly exposed to external conditions, domestic monetary policy remains influential. Changes in the State Bank of Vietnam's (SBV) policy rate affect borrowing costs and the valuation of expected corporate cash flows. Using ARDL, Nguyen Trung Thanh and Do Linh (2016) find that raising the refinancing rate or required-reserve ratio reduces the VN- Index in the long run, while short-run impacts are more limited. An EGARCH-M model by Nguyen and Nguyen (2021) also shows that high rate or high inflation signals cause current month returns to fall.

However, studies including Vo and Nguyen (2024) consistently show that SBV's effects are weaker and slower compared with U.S. monetary spillovers, due to Vietnam's financial openness and managed-float exchange-rate regime. During global tightening, SBV interventions generally stabilize liquidity rather than determine market direction.

Hypothesis 2 is therefore supported: SBV policy affects stock returns, but its magnitude is smaller relative to U.S. monetary policy.

2.3 Sectoral Heterogeneity in Policy Transmission

Empirical evidence shows that monetary-policy shocks do not transmit uniformly across Vietnam's economic sectors. Using network and spillover models, Dang, Nguyen, and Vo (2023) demonstrate significant cross-sector risk transmission, identifying certain industries as persistent risk transmitters (e.g., Securities, Building Materials, Technology) while others function as risk recipients (e.g., Real Estate).

Zehri, Ben Youssef, and Iben Ammar (2024) distinguish between hawkish or inflation-driven shocks and growth-driven shocks in the U.S., finding that the former exert much stronger negative effects on emerging markets. This aligns with Vietnamese sectoral behavior: Nguyen (2025) reports that Vietnam's securities sector experienced a "triple-channel" shock, including exchange-rates, capital flows, and market psychology during the 2022–2023 tightening cycle. Vo and Nguyen (2024) further reveal that Minerals, Oil & Gas, and Rubber exhibit long-run sensitivity to global macroeconomic conditions and commodity-price shocks, amplifying their reactions to U.S. monetary shifts. Meanwhile, Ngo, Nguyen, Nguyen, and Le (2024) show that sectors such as Real Estate, Industrials, and Materials displayed unusually strong positive reactions to U.S. unconventional monetary policy announcements during COVID-19, highlighting crisis-regime-sector interactions.

Hypothesis 3: Monetary policy shocks have heterogeneous effects across Vietnamese sectors due to structural and financial differences among industries.

2.4 Global Risk and Macro-Financial Conditions

The transmission of U.S. monetary policy to emerging markets depends heavily on global and domestic macro-financial conditions. Global risk sentiment, proxied by the VIX, plays a central role: increases in VIX heighten risk aversion and magnify the negative impact of U.S. tightening on equity markets (Harikrishnan et al., 2023; Miranda-Agrippino & Rey, 2020; Engler et al., 2023).

Exchange-rate movements form a second key channel. U.S. rate hikes typically strengthen the USD, and Vietnam responds asymmetrically, with stronger reactions to USD declines than increases (Zehri et al., 2024). Evidence also shows that VND appreciation reduces long-run sectoral risk, while depreciation influences short-term market dynamics (Vo & Nguyen, 2024).

Domestic macro-fundamentals further condition spillovers. GDP growth supports higher stock returns and helps separate business-

cycle effects from pure policy transmission (Tillmann, 2016), while inflation affects both the Fed's reaction and Vietnamese investor sentiment; studies find that inflation shocks are linked with higher VN-Index movements in Vietnam (Nguyen & Le, 2023; Zehri et al., 2024).

2.5 Safe-Haven and Commodity Prices: Gold and Oil

Gold and oil prices provide additional channels. Gold acts as a safe-haven asset, with strong co-movement with Vietnamese equities and evolving spillover patterns due to "de-goldenization" policies (Nguyen et al., 2023; Raza et al., 2016). Oil prices also affect stock performance, with Vietnam showing a positive correlation between Brent crude and the VN-Index (Nguyen et al., 2023).
Therefore, **Hypothesis 4** proposes that global risk sentiment, exchange rates, GDP, inflation, and gold/oil prices jointly shape and amplify the effect of U.S. monetary policy on Vietnam's sectoral stock returns.

2.6 Crisis Interactions and Structural Breaks

Crisis periods heighten global uncertainty and strengthen the channels through which U.S. monetary policy affects Vietnam's sectoral stock returns. During COVID-19, Vietnamese sectors responded more strongly to U.S. unconventional monetary policy compared with previous crises. Ngo et al. (2024)[20] show that Real Estate, Industrials, Materials, and Finance exhibited significantly larger positive reactions to UMP announcements. This behavior aligns with findings that pandemic-era
U.S. interventions generated amplified spillovers to emerging markets (Engler et al., 2023; Arteta et al., 2022), consistent with heightened uncertainty documented by Dang et al. (2023).

The supply-chain crisis increased inflationary pressure and raised sensitivity to U.S. rate hikes. Zehri et al. (2024) find that inflation-driven U.S. monetary shocks are especially disruptive for emerging markets. Similarly, Harikrishnan et al. (2023) show that return spillovers rise during global supply-chain disruptions, matching the elevated volatility observed in Vietnam's industrial and export-oriented sectors (Vo & Nguyen, 2024).

The Russia-Ukraine conflict intensified commodity-price shocks, reinforcing monetary-policy spillovers. Vo and Nguyen (2024) report that Minerals, Oil & Gas, and Rubber were particularly vulnerable to macro-financial and commodity shocks during this period. Mistak and Ozkan (2024) further find that trade-integrated economies experience stronger contractions when geopolitical instability coincides with U.S. tightening.

Hypothesis 5: Crisis regimes-COVID-19, the supply-chain shock, and the Russia-Ukraine conflict-significantly amplify the impact of U.S. monetary policy on Vietnam's sectoral stock returns.

3. METHODOLOGY

3.1 Research Design

This study investigates the effects of U.S. monetary policy, domestic monetary policy, global risk, macro-financial conditions, sectoral heterogeneity, and crisis-period interactions on Vietnamese sectoral stock returns. The empirical analysis uses a balanced monthly panel dataset consisting of eleven sectors listed on the Ho Chi Minh Stock Exchange-Financials, Real Estate, Industrials, Consumer Staples, Materials, Utilities, Consumer Discretionary, Telecommunication, Technology, Energy, and Health Care. Sectoral stock returns, the primary dependent variable, are calculated as monthly percentage changes from sectoral price indices obtained from Vietstock Finance, covering the period May 2015 to June 2025 (122 months; N = 1,342).

Panel regression techniques are employed to exploit both cross-sector differences and within-sector time variation. Fixed Effects (FE) estimators are used to control for unobserved, time-invariant characteristics specific to each sector, while Random Effects (RE) models are estimated for comparison. Estimator consistency is assessed using the Hausman test, and inference relies on heteroskedasticity- and cluster-robust (sector-clustered) standard errors to ensure valid significance testing.

3.2 Variable Construction

The empirical analysis is built on a structured econometric framework that links sectoral stock returns to monetary- policy shocks, macro-financial conditions, sectoral characteristics, and crisis regimes. The dependent variable R_{it} is the monthly return of sector *i* at time *t*

U.S. monetary-policy shocks are captured through two event-dummy indicators: $FedHike_t$ (tightening) and $FedCut_t$ (easing). Domestic monetary-policy shocks from the State Bank of Vietnam (SBV) are analogously represented by $SBVHike_t$ and $SBVCut_t$. All four variables take the value 1 in the month of the policy action and 0 otherwise.

To control for macro-financial transmission mechanisms, the model incorporates a vector of global and domestic variables: $Z_t = \{VIX_t, \Delta USDVND_t, Inflation_t, GDP_t, Gold_t, Oil_t\}$

These variables capture global risk sentiment, exchange-rate pressures, domestic inflation dynamics, real economic activity, and commodity-price sensitivity.

Sector heterogeneity is examined using interaction terms between U.S. monetary-policy shocks and sector identifiers ($FedHike_t \times SectorID_i$ and $FedCut_t \times SectorID_i$). SectorID is modeled as a categorical factor to allow for differential slope coefficients across industries.

To account for periods of systemic instability, three crisis indicators, COVID-19, the global supply-chain shock, and the Russia-Ukraine conflict, are incorporated as structural dummy variables:

$C_t = \{COVID19_t, SupplyChain_t, War_t\}$

Each variable equals 1 during the respective crisis months and 0 otherwise.

This unified econometric framework enables the study to isolate the contemporaneous effects of monetary-policy actions, capture cross-sector variation, and assess whether external shocks transmit differently under crisis conditions.

3.3 Econometric Models

Each hypothesis corresponds to a specific empirical model.

3.3.1 Baseline Monetary-Policy and Macro-Financial Model

A unified fixed-effects panel regression model is used to examine the effects of U.S. monetary policy (β_1, β_2), domestic monetary policy (β_3, β_4), and macro-financial conditions on sectoral stock returns (γ'):

$$R_{it} = \alpha_i + \beta_1 FedHike_t + \beta_2 FedCut_t + \beta_3 SBVHike_t + \beta_4 SBVCut_t + \gamma' Z_t + \delta C_t + \varepsilon_{it} \quad (I)$$

3.3.2 Sectoral Heterogeneity

To test whether monetary-policy effects differ across sectors:

$$R_{it} = \alpha_i + \beta_1 FedHike_t + \beta_2 FedCut_t + \beta_3 SBVHike_t + \beta_4 SBVCut_t + \theta_{1i}(FedHike_t \times SectorID_i) + \theta_{2i}(FedCut_t \times SectorID_i) + \gamma' Z_t + \delta C_t + \varepsilon_{it} \quad (II)$$

The interaction terms θ_1 and θ_2 capture differential responses across sectors.

3.3.3 Crisis-Period Interactions

The crisis interaction model evaluates whether U.S. monetary-policy transmission changes during periods of systemic instability:

$$R_{it} = \alpha_i + \beta_1 FedHike_t + \beta_2 FedCut_t + \beta_3 SBVHike_t + \beta_4 SBVCut_t + \gamma' Z_t + \delta C_t + \phi_1(FedHike_t \times COVID19_t) + \phi_2(FedCut_t \times COVID19_t) + \phi_3(FedHike_t \times SupplyChain_t) + \phi_4(FedCut_t \times SupplyChain_t) + \phi_5(FedHike_t \times War_t) + \phi_6(FedCut_t \times War_t) + \varepsilon_{it} \quad (III)$$

The six ϕ coefficients capture how Fed shocks propagate differently under the COVID-19 pandemic, the global supply- chain crisis, and the Russia-Ukraine war.

3.4 Estimation Strategy

All models are estimated using the within FE estimator:

$$\hat{\beta}_{FE} = arg\ min \sum (R_{i,t} - \bar{R}_i - (X_{i,t} - \bar{X}_i)\beta)^2$$

β

i,t

RE models are also computed for comparison. The Hausman test determines whether FE or RE is consistent; however, FE results are used as the primary interpretation due to the focus on within-sector variation. Cluster-robust (sector-level) standard errors are used to address serial correlation and heteroskedasticity.

3.5 Summary of Hypotheses

Hypothesis 1: U.S. monetary tightening decreases sectoral stock returns more strongly than U.S. monetary easing increases them.

Hypothesis 2: SBV rate hikes reduce sectoral stock returns, while SBV rate cuts increase sectoral stock returns.

Hypothesis 3: The effects of U.S. monetary-policy shocks on stock returns differ across sectors.

Hypothesis 4: Global risk, exchange-rate movements, inflation, and commodity prices amplify the impact of U.S. monetary-policy shocks on Vietnam's sectoral stock returns.

Hypothesis 5: The impact of U.S. monetary-policy shocks on sectoral stock returns is stronger during crisis periods than during non-crisis periods.

4. DATA ANALYSIS

4.1 Overview of Empirical Finding

The empirical analysis is based on a balanced panel of 11 Vietnamese sectors spanning 122 months, resulting in 1,342 observations. The fixed-effects estimator is selected as the primary model after comparing it with the random-effects estimator using the Hausman test, which yields a p-value of 1, indicating no statistically significant difference between the two estimators. Because both models generate nearly identical coefficient signs and levels of significance, the fixed-effects (FE) results are reported as the main basis for interpretation.

Table 4.1. Baseline fixed-effects model for Vietnam sectoral stock returns

Variable	Coefficient	Std. Error	t-stat	p-value
Fed Hike	0.00513	0.00505	1.016	0.310
Fed Cut	0.01748	0.00643	2.717	0.0067**
SBV Hike	-0.04212	0.01880	-2.241	0.0252*
SBV Cut	-0.02336	0.00971	-2.405	0.0163*
VIX	-0.00449	0.00047	-9.535	<0.001***
USD/VND Exchange Rate	-0.96074	0.25835	-3.719	<0.001***
Inflation (YoY)	-0.92236	0.18742	-4.922	<0.001***
Gold Price	0.05107	0.05755	0.888	0.375
Oil Price	0.10368	0.01773	5.847	<0.001***
COVID-19 Pandemic	0.09334	0.01088	8.577	<0.001***
Supply-chain/Energy Shock	-0.06469	0.01119	-5.779	<0.001***
Russia–Ukraine War	0.00147	0.00817	0.180	0.857

Note: ***, **, *, . denote significance at 1%, 5%, 10% levels respectively.

The adjusted R-squared of the model is 0.179, implying that the included monetary-policy and macro-financial variables account for around 18 percent of the variation in sectoral stock returns. The F-statistic is highly significant ($p < 0.001$), confirming overall model validity.

4.2 Asymmetric Effects of U.S. Monetary Policy

The FE results show that Fed_Hike carries a small and statistically insignificant coefficient ($\beta1 = 0.00513$, $p = 0.310$), indicating that Federal Reserve tightening cycles do not produce measurable contemporaneous effects on Vietnamese equity returns. In contrast, the coefficient on Fed_Cut is positive and statistically significant ($\beta2 = 0.01748$, $p = 0.0067$), suggesting that U.S. monetary easing is associated with higher sectoral stock performance.

Table 4.2. Asymmetric effects of U.S. policy (Fed Hike vs Cut)

Variable	Coefficient	Std. Error	t-stat	p-value
Fed Hike	0.00513	0.00505	1.016	0.310
Fed Cut	0.01748	0.00643	2.717	0.0067**

Note: ***, **, *, . denote significance at 1%, 5%, 10% levels respectively.

Overall, the panel evidence supports H1 partially. U.S. monetary easing exerts a statistically significant and economically meaningful positive impact on Vietnamese sectoral returns, whereas monetary tightening does not demonstrate a discernible effect within the sample period.

4.3 Domestic Monetary Policy Effects

The estimation results show that both SBV interest-rate shocks exhibit statistically significant effects on sectoral returns within the fixed-effects specification. The coefficient on SBV_Hike is negative and significant ($\beta3 = -0.04212$, $p = 0.0252$), indicating that domestic monetary tightening is associated with lower sectoral returns.

Table 4.3. Effects of SBV policy rate changes

Variable	Coefficient	Std. Error	t-stat	p-value
SBV Hike	-0.04212	0.01880	-2.241	0.0252*
SBV Cut	-0.02336	0.00971	-2.405	0.0163*

Note: ***, **, *, . denote significance at 1%, 5%, 10% levels respectively.

Similarly, SBV_Cut also carries a significant negative coefficient ($\beta4 = -0.02336$, $p = 0.0163$). Unlike the positive effect of Fed_Cut, which stimulates stock performance, the negative sign for SBV easing suggests that domestic rate cuts coincide with periods of

heightened domestic stress rather than market optimism.

The robustness check using the random-effects model yields nearly identical coefficient magnitudes and significance levels for both SBV variables. The persistence of the negative effect across FE and RE specifications confirms that domestic monetary policy has a strong and consistent impact on sectoral return dynamics.

Overall, these results provide clear support for Hypothesis 2. Vietnamese monetary policy actions, both tightening and easing, exert immediate and economically meaningful impacts on stock market sectors. Unlike U.S. monetary policy shocks, whose influence is concentrated in easing cycles, SBV rate changes exhibit a stable and symmetric relationship with sectoral performance across the sample period.

4.4 Sectoral Heterogeneity in U.S. Policy Transmission

The estimation results show no statistically significant interaction terms for either Fed_Hike or Fed_Cut. All coefficients associated with Fed_Hike × Sector are extremely small in magnitude, ranging from -0.0193 to 0.0230, with p-values between 0.29 and 0.99. Similarly, the interaction terms for Fed_Cut × Sector_ID also exhibit very low t-statistics and high p-values (all $p > 0.29$). None of the eleven sectors displays a statistically distinct reaction relative to the baseline sector.

Moreover, the main coefficients of Fed_Hike and Fed_Cut become insignificant in the interaction model ($\delta 1 = 0.0001$, $p = 0.994$; $\delta 2 = 0.00767$, $p = 0.706$), indicating that once sector-specific slopes are introduced, no detectable effect remains for any individual sector. This shift reflects diluted statistical power when U.S. policy shocks are partitioned across multiple sector- level slopes.

Table 4.4. Main Effects of U.S. Monetary Policy in the Interaction Model

Variable	Coefficient	Std. Error	t-stat	p-value
Fed Hike	0.00034	0.01568	0.022	0.983
Fed Cut	0.00750	0.02035	0.369	0.713

Note: ***, **, *, . denote significance at 1%, 5%, 10% levels respectively.

The overall fit of the interaction model remains stable; however, the joint insignificance of all interaction terms suggests that the responsiveness of sectoral returns to U.S. monetary policy changes does not vary significantly across sectors. In quantitative terms, none of the interaction coefficients approaches statistical significance, and all lie very close to zero.

Taken together, the regression results indicate that no sector exhibits a distinct sensitivity to U.S. monetary policy shocks once sector-specific interactions are incorporated. Therefore, the empirical evidence does not support Hypothesis 3, as the data reveal no measurable sectoral heterogeneity in the transmission of U.S. interest-rate changes.

4.5 Global Risk, and Macro-Financial Transmission

The regression results indicate that several macro-financial variables display strong and statistically significant effects. The coefficient on VIX is negative and highly significant ($\gamma 1 = -0.00449$, $p < 0.001$), indicating that rising global risk aversion leads to immediate declines in sectoral returns.

The exchange-rate variable also exhibits a large and significant effect. The coefficient on the USD/VND change is strongly negative ($\gamma 2 = -0.96074$, $p < 0.001$. This sizeable elasticity highlights the vulnerability of Vietnamese equities to exchange-rate pressures, consistent with the increasing openness of the economy and dependence on imported inputs and external demand.

Table 4.5. Global risk and macro-financial channels

Variable	Coefficient	Robust SE	t-stat	p-value
VIX	-0.00449	0.00047	-9.535	<0.001***
USD/VND Exchange Rate	-0.96074	0.25835	-3.719	<0.001***
Inflation (YoY)	-0.92236	0.18742	-4.922	<0.001***
Gold Price	0.05107	0.05755	0.888	0.375
Oil Price	0.10368	0.01773	5.847	<0.001***

Note: ***, **, *, . denote significance at 1%, 5%, 10% levels respectively.

Domestic inflation further exerts a substantial negative impact on stock returns. The coefficient of -0.92236 ($p < 0.001$) indicates that higher consumer prices compress profitability and reduce equity valuations across all sectors.

Among global commodities, Oil displays a positive and highly significant coefficient ($\gamma 6 = 0.05107$, $p < 0.001$), implying that higher global oil prices translate into improved returns for certain Vietnamese industries, likely reflecting gains in energy-related or export-oriented sectors. Gold, however, remains insignificant ($p = 0.375$), indicating limited safe-haven spillover effects on equity returns.

Overall, the strong significance of VIX, exchange-rate movements, inflation, and oil prices provides clear empirical support for Hypothesis 4. Global risk sentiment and macro-financial fundamentals have a significant and immediate impact across Vietnamese stock-market sectors, confirming that macro-financial transmission channels play a central role in shaping return dynamics.

4.6 Crisis-Specific Effects

In the combined-crisis model, the interaction coefficient for Fed_Hike × CrisisAll is negative but statistically insignificant ($\delta 1 = -0.0104$, $p = 0.329$), indicating no evidence that the impact of Fed tightening changes during crisis periods. By contrast, the interaction term Fed_Cut × CrisisAll is positive and statistically significant ($\delta 2 = 0.0350$, $p = 0.0086$), suggesting that U.S. monetary easing has a stronger effect on sectoral returns during crises compared to non-crisis periods. This implies that accommodative U.S. policy becomes more effective in supporting Vietnamese equity performance when global or domestic uncertainty is elevated.

Table 4.6A. Fed policy × aggregated crisis dummy

Variable	Coefficient	Std. Error	t-stat	p-value
Fed Hike × Crisis_All	-0.00950	0.0105	-0.903	0.367
Fed Cut × Crisis_All	0.03575	0.0132	2.702	0.007**

Note: ***, **, *, . denote significance at 1%, 5%, 10% levels respectively.

To provide a more granular interpretation, a second model introduces three separate crisis interactions. The results show clear differentiation across crisis types. During the COVID-19 pandemic, Fed tightening produces a significant negative interaction effect ($\varphi 1 = -0.0473$, $p < 0.001$), while Fed easing generates a strong positive response ($\varphi 2 = 0.1391$, $p < 0.001$). These results indicate that the Vietnamese market became substantially more sensitive to U.S. monetary policy in the pandemic period, with rate cuts providing considerable support to equity returns. For the global supply-chain and energy shock, Fed hikes exhibit a significant positive interaction ($\varphi 3 = 0.0511$, $p < 0.001$), whereas Fed cuts exhibit a significant negative effect ($\varphi 4 = -0.0616$, $p < 0.001$). This sign reversal suggests that during supply-chain disruptions, markets interpret Fed easing as a signal of worsening global demand conditions rather than a stimulative event. In contrast, no significant interaction is found between Fed hikes and the Russia-Ukraine War ($p = 0.872$). However, Fed cuts produce a strongly negative and highly significant interaction ($\varphi = -0.102$, $p < 0.001$), consistent with increased risk sensitivity during this period.

Table 4.6B. Crisis-specific effects of U.S. monetary policy

Interaction Term	Coefficient	Robust SE	t-stat	p-value
Fed Hike × COVID-19	-0.0473	0.0088	-5.318	<0.001***
Fed Cut × COVID-19	0.1391	0.0180	7.719	<0.001***
Fed Hike × Energy Shock	0.0511	0.0124	4.111	<0.001***
Fed Cut × Energy Shock	-0.0616	0.0129	-4.772	<0.001***
Fed Hike × Russia-Ukraine War	0.0033	0.0110	0.295	0.768
Fed Cut × Russia-Ukraine War	-0.1017	0.0204	-4.978	<0.001***

Note: ***, **, *, . denote significance at 1%, 5%, 10% levels respectively.

Taken together, the crisis-interaction results demonstrate clear evidence of crisis-state asymmetry in the transmission of U.S. monetary policy. While Fed tightening shows limited or inconsistent crisis effects, U.S. monetary easing exhibits strong and crisis-dependent responses, particularly during the COVID-19 pandemic and the supply-chain shock. These findings provide strong empirical support for Hypothesis 5, showing that the effectiveness of U.S. monetary policy in influencing Vietnamese sectoral returns depends critically on the prevailing crisis environment.

5. CONCLUSIONS

The analysis reveals a pronounced asymmetry in U.S. monetary policy transmission: easing episodes significantly boost Vietnamese sectoral returns, while rate increases show no measurable contemporaneous impact. This finding challenges the "global financial cycle" hypothesis of Miranda-Agrippino and Rey (2020) and Engler et al. (2023), which predicts stronger effects from U.S. tightening through capital flow reversals. Three explanations merit consideration: the sample contains only one major U.S. tightening cycle (2022–2023), limiting statistical power; Vietnamese authorities may have implemented countervailing measures that cushioned tightening effects; or monthly observation frequency may obscure higher-frequency adjustment dynamics.

Both increases and decreases in the State Bank of Vietnam (SBV) policy rate are associated with negative sectoral returns,

diverging from conventional theory. Consistent with Vo and Nguyen (2024), this symmetric negative relationship suggests markets interpret SBV rate changes primarily as signals of economic distress rather than sources of stimulus. Rate cuts convey negative information about fundamentals that dominates any valuation boost, while rate increases signal overheating or inflation concerns.

Contrary to Dang et al. (2023), the study finds no significant differential effects across sectors when interaction terms are included, suggesting Vietnamese equity sectors respond uniformly to monetary shocks at monthly frequency. Macro-financial variables conform to theoretical expectations: elevated VIX depresses returns through flight-to-safety, VND depreciation reflects capital outflow concerns, and inflation erodes real earnings. Oil prices positively impact returns, likely capturing global activity. Gold remains insignificant, consistent with Nguyen et al. (2023).

Crisis interactions reveal important temporal variation. U.S. easing during COVID-19 strongly supported returns through global liquidity provision, but had opposite effects during supply-chain disruptions and the Russia–Ukraine conflict. This reversal reflects distinct shock structures: COVID-19 represented a demand-side disruption amenable to monetary stimulus, while subsequent crises entailed supply-side constraints that accommodation could not address.

This study provides new evidence on monetary policy transmission to Vietnamese equity markets with several implications. Results highlight the importance of monitoring U.S. policy easing as a driver of Vietnamese equity performance, while challenging simple applications of the global financial cycle framework given the asymmetric response pattern. The symmetric negative association with SBV rate changes suggests domestic monetary policy has limited effectiveness in supporting equity markets, as investors interpret adjustments as distress signals rather than stimulus.

The significant roles of exchange rate dynamics, inflation, and global risk aversion underscore the need for comprehensive macro-financial risk management. Policymakers should prioritize exchange rate stability and inflation control, while the crisis-heterogeneity results emphasize that monetary policy effects depend critically on shock structure.

Several limitations suggest future research directions. Monthly data may obscure high-frequency dynamics; firm-level analysis could illuminate heterogeneity in balance sheets and foreign ownership; the limited U.S. tightening coverage constrains asymmetry inference; and the focus on conventional tools excludes unconventional monetary policy instruments. Despite these limitations, this study contributes to the literature on monetary policy spillovers to emerging markets and provides insights for navigating global and domestic monetary conditions in Vietnam.

REFERENCES

1) Arteta, C., Kamin, S., & Ruch, F. U. (2022). *How do rising U.S. interest rates affect emerging and developing economies? It depends* (Policy Research Working Paper No. 10258). World Bank. https://doi.org/10.1596/1813- 9450-10258
2) Bokhari, S. (2025, October 6). *Vietnam's market reform wave: A market at a turning point*. VanEck.
3) https://www.vaneck.com/us/en/blogs/emerging-markets-equity/vietnams-market-reform-wave-a-market-at-a-turning- point/
4) Dang, T. H.-N., Nguyen, N. T., & Vo, D. H. (2023). Sectoral volatility spillovers and their determinants in Vietnam.
5) *Economic Change and Restructuring, 56*(4), 681–700. https://doi.org/10.1007/s10644-022-09446-9
6) Engler, P., Piazza, R., & Sher, G. (2023). *Spillovers to emerging markets from US economic news and monetary policy* (IMF Working Paper No. 2023/107). International Monetary Fund. https://doi.org/10.5089/9798400234811.001
7) Harikrishnan, N., Silk, B., & Yoldas, E. (2023). U.S. interest rates and emerging market currencies: Taking stock 10 years after the taper tantrum. FEDS Notes. Board of Governors of the Federal Reserve System. https://doi.org/10.17016/2380-7172.3385
8) Lastauskas, P., & Nguyen, A. D. M. (2024). *Spillover effects of US monetary policy on emerging markets amidst uncertainty*. Journal of International Financial Markets, Institutions and Money, 92, Article 102822.
9) https://doi.org/10.1016/j.intfin.2024.101956
10) Miranda-Agrippino, S., & Rey, H. (2020). U.S. monetary policy and the global financial cycle. *The Review of Economic Studies, 87*(6), 2754–2776. https://doi.org/10.1093/restud/rdaa019
11) Mistak, J., & Ozkan, F. G. (2024). *Asymmetric monetary policy spillovers: The role of supply chains, credit networks and fear of floating* (SUERF Policy Brief No. 982). The European Money and Finance Forum (SUERF). SSRN.
12) https://doi.org/10.2139/ssrn.4939731
13) Nguyen Trung Thanh, & Do, T. L. (2016). *Impacts of monetary policy on Vietnam stock price.* In *Proceedings of the International Conference on Electronics, Mechanics, Culture and Medicine* (Vol. 83, pp. 143–147). Atlantis Press.
14) https://doi.org/10.2991/emcm-15.2016.26
15) Ngo, N., Nguyen, H., Nguyen, Y., & Le, S. (2024). How does the Vietnamese stock market react when the Fed gives an announcement in time at the zero lower bound? *Heliyon, 10*(21), e0047. https://doi.org/10.1016/j.heliyon.2024.e40047
16) Nguyen, H.-D., & Le, V. L. (2023). Impacts of inflation on the Vietnamese stock market in economic turbulence.
17) *Economics and Business, 66*(1), 16–20. https://doi.org/10.31276/VMOSTJOSSSH.66(1).16-20
18) Nguyen, D. H., & Nguyen, T. T. B. (2021). *Interest and inflation rates as leading indicators of Vietnam's stock returns.* In Proceedings of the SSIM 2021 Conference on Social Sciences and Innovation Management (pp. 1–14). Chaoyang University

of Technology.

19) Nguyen, K. A. (2025). The influence of U.S. monetary policy on the stock prices of listed securities firms in Vietnam. *European Journal of Management, Economics and Business, 2*(4), 55–59. https://doi.org/10.59324/ejmeb.2025.2(4).04
20) Nguyen, T. H., Luong, T. A., Le, T. U. P., & Dau, T. V. (2023). Gold price, oil price, and stock market return spillovers: Empirical evidence from Vietnam. *VNU Journal of Economics and Business, 3*(6), 13–25. https://jeb.ueb.edu.vn
21) Ngo, T. T. (2024, June). *Vietnam: A unique blend of growth and diversification*. Eastspring Investments. https://www.eastspring.com/insights/deep-dives/vietnam-a-unique-blend-of-growth-and-diversification
22) Raza, N., Shahzad, S. J. H., Tiwari, A. K., & Shahbaz, M. (2016). Asymmetric impact of gold, oil prices and their volatilities on stock prices of emerging markets. *Resources Policy, 49*, 290–301. https://doi.org/10.1016/j.resourpol.2016.06.011
23) Tillmann, P. (2016). Unconventional monetary policy and the spillovers to emerging markets. *Journal of International Money and Finance, 66*, 136–156. https://doi.org/10.1016/j.jimonfin.2015.12.010
24) Vo, D. H., & Nguyen, H. L.-P. (2024). Market risk spillover and the asymmetric effects of macroeconomic fundamentals on market risk across Vietnamese sectors. *Financial Innovation, 10*(95). https://doi.org/10.1186/s40854-023-00602-2
25) Zehri, C., Ben Youssef, W. A., & Iben Ammar, L. S. (2024). Uncovering asymmetrical contagion effects: US monetary policy and emerging markets. The Journal of International Trade & Economic Development, 34(1), 175–
26) 196. https://doi.org/10.1080/09638199.2024.2310700