

Spillover Effect of US Monetary Policy on the Indonesian Economy

Nuning Trihadmini^{1*} , R Mahelan Prabantarikso²

¹School of Business and Social Innovation, Atma Jaya Catholic University of Indonesia

²Master of Management, Indonesia Banking School (IBS)

Jl. Jenderal Sudirman No. 51, Karet Semanggi, Jakarta 12930, Indonesia

*Corresponding Email: nuning.trihadmini@atmajaya.ac.id

ARTICLE INFORMATION

ABSTRACT

Publication information

Research article

HOW TO CITE

Trihadmini, N. (2026). Spillover effect of US monetary policy on the Indonesian economy. *International Journal of Accounting and Finance in Asia Pacific*, 9(2), 592-612.

DOI:

<https://doi.org/10.32535/ijafap.v9i2.4577>

Copyright@ 2026 owned by Author(s).

Published by IJAFAP



This is an open-access article.

License:

Attribution-Noncommercial-Share Alike
(CC BY-NC-SA)

Received: 18 April 2026

Accepted: 20 May 2026

Published: 20 June 2026

Post-pandemic monetary tightening in the United States (US) has increased external vulnerabilities for emerging economies, including Indonesia. This study examines the spillover effects of US monetary policy on Indonesia's financial and real sectors during 2020–2023. Using monthly data, a Vector Autoregression (VAR) model and Forecast Error Variance Decomposition (FEVD) are employed to analyze dynamic shock transmission between US and Indonesian macro-financial variables. The results show that spillovers from US financial variables to Indonesia's financial sector average 9.23%, exceeding those from US real variables (7.80%). The largest spillovers originate from the Dow Jones Industrial Average (11.62%) and the US 10-year Treasury yield (10.54%). Indonesia's Jakarta Composite Index (JCI) and exchange rate absorb the strongest external shocks, with spillover values of 10.19% and 9.72%, respectively. In the real sector, the average spillover effect reaches 7.46%, while the Composite Leading Indicator (CLI) records the highest spillover absorption (10.28%). The strongest individual transmission is observed from the US government debt to Indonesia's CLI, reaching 23.69%. These findings indicate that US monetary policy influences Indonesia mainly through financial-market and expectations channels, highlighting the need to strengthen macro-financial resilience and monitor global forward-looking indicators.

Keywords: Composite Leading Indicator; Forecast Error Variance Decomposition; Monetary Policy Spillovers; United States; Vector Autoregression

JEL Classification: E44; E52; F42

INTRODUCTION

The COVID-19 pandemic triggered unprecedented disruptions in the global economy, prompting central banks to implement extraordinary monetary policy measures to stabilize financial markets and economic activity. In the United States (US), the Federal Reserve adopted an accommodative monetary stance through near-zero interest rates and large-scale asset purchase programs. However, as the global economy transitioned into the recovery phase, rising inflationary pressures, supply chain disruptions, and geopolitical tensions led to a significant shift toward monetary tightening, increasing uncertainty regarding the future path of US monetary policy (Arbatli-Saxegaard et al., 2024; Engler et al., 2023; International Monetary Fund [IMF], 2023; Ntshangase et al., 2023; Surtpto et al., 2023). Given the dominant role of the US dollar in the international financial system, changes in US monetary policy have substantial implications for emerging economies through capital flows, exchange rate adjustments, and financial market transmission mechanisms.

This study aims to examine the spillover effects of US monetary policy on Indonesia's financial and real sectors using a Vector Autoregression (VAR) model with monthly data from 2020 to 2023. From a theoretical perspective, the global financial cycle framework suggests that US monetary policy strongly influences global liquidity conditions, investors' risk appetite, and international capital allocation (Miranda-Agrippino & Rey, 2020). Monetary tightening in the US tends to strengthen the US dollar, widen interest rate differentials, and encourage portfolio reallocation toward US assets, thereby increasing vulnerabilities in emerging markets (Bruno & Shin, 2015; Rey, 2015). For countries such as Indonesia, which remain exposed to external financing and exchange rate volatility, these spillover effects may affect not only financial markets but also broader macroeconomic conditions. Empirical evidence during the post-pandemic period indicates strong co-movements between US monetary policy and Indonesia's macro-financial indicators.

Since 2022, the Federal Reserve's tightening cycle has coincided with fluctuations in Indonesia's bond yields, exchange rates, and stock market performance, reflecting substantial external monetary transmission channels. Beyond financial markets, tighter global financial conditions may also influence real economic activity by affecting investment decisions, inflationary pressures, and overall economic growth dynamics (Umar & Kespo, 2024). Nevertheless, despite the growing body of literature on US monetary policy spillovers, existing studies predominantly concentrate on financial dimensions, such as capital flows, exchange rates, stock prices, and interest rates, while insufficient attention has been devoted to the integrated interaction between financial and real sectors, particularly in the post-pandemic context characterized by heightened uncertainty and structural adjustment (Chen et al., 2016; Zehri et al., 2024). In addition, forward-looking indicators, such as the Composite Leading Indicator (CLI), which are capable of capturing future economic expectations and cyclical turning points, remain relatively underexplored in the spillover literature. This limitation highlights an important research gap and establishes the novelty of the present study, which lies in its integrated assessment of spillover effects across both financial and real sectors while incorporating the CLI as a forward-looking variable to better capture the broader macroeconomic transmission of US monetary policy shocks in Indonesia during the post-pandemic period.

To provide an initial illustration of these transmission patterns, Figures 1 and 2 present the movement of the Federal Funds Rate (FFR) alongside Indonesia's financial and real sector indicators during the post-pandemic period

Figure 1. Movement of US Fund Rate with Financial Variables in Indonesia (O/N Interest Rates, Bond Yields, Stock Indexes, and Rupiah Exchange Rates)

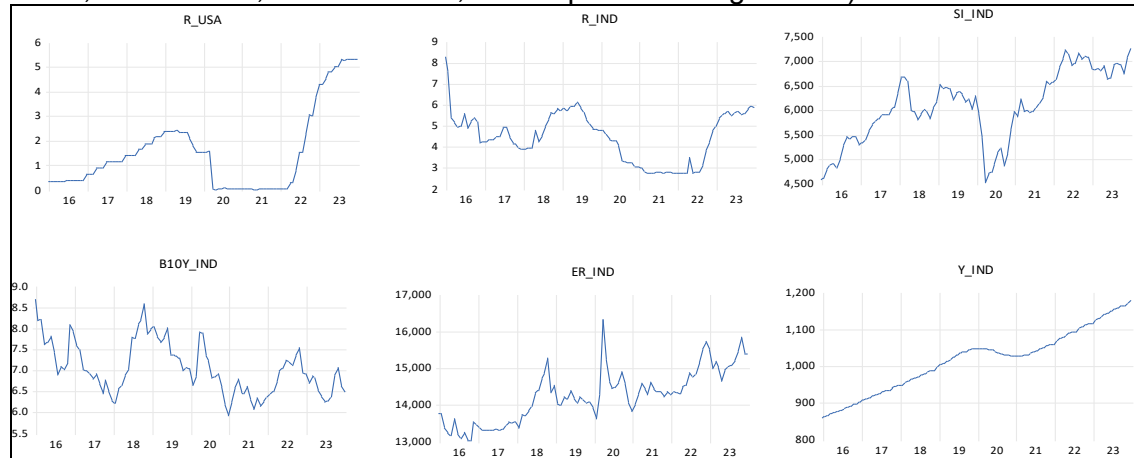
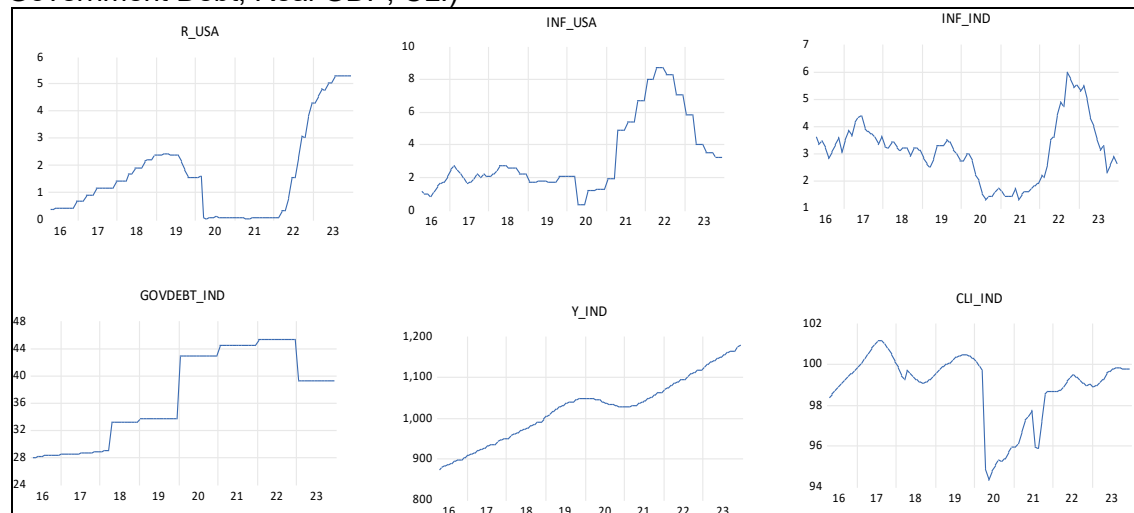


Figure 2. Movement of Fed Fund Rate with Real Variables in Indonesia (Inflation, Government Debt, Real GDP, CLI)



Figures 1 and 2 suggest that changes in US monetary policy are associated with fluctuations in Indonesia's financial indicators, including bond yields, exchange rates, and stock market performance, while broader macroeconomic variables such as inflation, economic growth, and the CLI also exhibit notable movements during periods of monetary tightening. These patterns indicate the presence of potential spillover effects extending beyond financial markets into the real sector, thereby motivating a more integrated empirical investigation.

Despite the growing body of literature on US monetary policy spillovers, prior studies predominantly focus on financial variables such as exchange rates, stock prices, capital flows, and interest rates, with relatively limited attention given to the interconnected transmission between financial and real sectors, particularly in the post-pandemic context characterized by heightened uncertainty and structural adjustment (Chen et al., 2016; Zehri et al., 2024). Moreover, forward-looking indicators such as the CLI, which capture future economic expectations and cyclical turning points, remain largely underexplored in the spillover literature. This limitation reveals an important research gap in understanding how external monetary shocks simultaneously propagate across financial and real sectors in emerging economies such as Indonesia.

The novelty of this study lies in its integrated analysis of spillover dynamics across both financial and real sectors while incorporating the CLI as a forward-looking variable to capture broader macroeconomic transmission mechanisms. The significance of this research stems from its potential to improve understanding of external monetary shock transmission in emerging economies during the post-pandemic period. Furthermore, this study contributes to the literature by identifying dominant US macro-financial variables that generate spillover effects and by providing policy-relevant insights for designing more adaptive and resilient macroeconomic strategies to mitigate external vulnerabilities.

LITERATURE REVIEW

Global Financial Cycle Theory and US Monetary Policy Transmission

The Global Financial Cycle theory posits that US monetary policy is a primary driver of global financial conditions, influencing liquidity, capital flows, asset prices, and investors' risk appetite across countries regardless of their exchange rate regime (Miranda-Agrippino & Rey, 2020). Through changes in interest rate differentials, portfolio allocation, and exchange rate expectations, shifts in the Federal Reserve's policy stance affect financial and macroeconomic conditions worldwide. Consistent with this view, Déés & Galesi (2021) and Obstfeld (2019) show that US monetary easing lowers global yields, increases asset prices, and stimulates cross-border capital flows, generating synchronized movements in financial markets and economic activity. These findings further suggest that exchange rate flexibility provides only partial insulation from US monetary shocks, while financial integration and network effects amplify spillovers across countries.

The transmission of US monetary policy becomes stronger during periods of heightened uncertainty. Aastveit et al. (2017) argue that uncertainty affects the effectiveness of monetary policy through investment and financial channels by altering expectations, risk perceptions, and financing conditions. Consequently, changes in global risk appetite can amplify monetary spillovers, reinforce deleveraging behavior, and intensify fluctuations in asset prices and capital flows. Although monetary policy serves as a stabilizing mechanism through interest rates, risk premiums, and financial conditions, the effectiveness of dampening the global financial cycle depends on complementary macroprudential policies that limit leverage and systemic risk accumulation (Rogers et al., 2025).

For emerging economies such as Indonesia, US monetary policy spillovers are transmitted mainly through interest rate, exchange rate, and asset price channels. Higher US interest rates tend to trigger capital outflows, increase depreciation pressures on domestic currencies, and tighten domestic financial conditions. These adjustments affect stock markets, bond yields, and credit conditions, which subsequently spill over to inflation, investment, consumption, and economic growth. This framework suggests that US monetary policy shocks can simultaneously influence both financial and real sectors, highlighting the importance of analyzing macro-financial linkages in emerging market economies.

Monetary Policy Spillovers and Transmission Channels

The literature identifies financial and credit channels as the primary mechanisms through which US monetary policy spillovers are transmitted internationally. Changes in US monetary conditions influence interest rate expectations, risk premiums, funding costs, and cross-border credit allocation, thereby shaping domestic financial conditions in

recipient economies. Evidence from China indicates that the financial channel exerts a stronger and more persistent effect than trade or exchange rate channels, as US monetary tightening increases sovereign risk premiums, raises corporate financing costs, and weakens domestic financial conditions despite relatively limited effects on real activity (Zhang et al., 2022). Similarly, cross-border transmission through the bank credit channel becomes more pronounced under low-interest-rate environments, encouraging credit expansion while simultaneously increasing risk-taking behavior and banking sector vulnerabilities (Cao et al., 2023). These findings suggest that global financial integration amplifies the transmission of US monetary policy through financial markets, credit conditions, and market expectations.

Beyond financial markets, US monetary policy also affects the global economy through commodity price and oil market channels. Federal Reserve tightening reduces global demand, depresses commodity and oil prices, and weakens economic activity, particularly in emerging economies that are more vulnerable to capital flow reversals and external financing constraints (Degasperi et al., 2026; Li et al., 2025). These spillovers can further constrain the effectiveness of domestic monetary policy by increasing risk premiums and tightening financial conditions. The interaction between monetary policy and oil shocks is particularly important because the appropriate policy response depends on the source of the shock. While oil demand shocks stimulate aggregate demand and inflation, oil supply shocks generate cost-push inflation, creating a trade-off between price stability and economic growth. In contrast, oil risk shocks are transmitted primarily through financial and confidence channels, increasing uncertainty and weakening economic activity. Consequently, the macroeconomic impact of oil shocks and the effectiveness of monetary policy responses depend critically on whether the transmission originates from demand, supply, or financial factors (Aslam, 2026).

Chen et al. (2016) and Lin et al. (2025) further emphasize the role of global liquidity conditions, showing that tighter US monetary policy reduces international capital flows and weakens macroeconomic stability in financially integrated economies. In addition, Dedola et al. (2017) identify both financial and trade channels as important mechanisms through which US monetary policy shocks are transmitted internationally. Several studies further document the importance of exchange rate, capital flow, and credit channels in transmitting US monetary policy shocks to emerging economies. Azad & Serletis (2020) and Camara (2025) show that tighter US monetary policy generates significant exchange rate and monetary spillovers to emerging markets. Similarly, Ahmed and Zlate (2014) find that capital flows to emerging market economies remain highly sensitive to shifts in global financial conditions and US interest rates. Bräuning and Ivashina (2020) further demonstrate that US monetary tightening significantly affects emerging market credit cycles.

Meanwhile, Iacoviello and Navarro (2019) find that global uncertainty and monetary policy shocks substantially influence macroeconomic fluctuations in open economies. These findings suggest that US monetary policy shocks are unlikely to affect only financial variables but may also extend to broader macroeconomic conditions through interconnected transmission channels. Therefore, understanding the interaction between financial and real sectors becomes essential in assessing the overall impact of external monetary disturbances.

Previous Empirical Studies on US Monetary Policy Spillovers

Several recent studies examine the effects of US monetary policy spillovers in both advanced and emerging economies. Arbatli-Saxegaard et al. (2024) evaluate the impact of US monetary policy on Asia-Pacific economies using a Structural Vector

Autoregression (SVAR) model and find that spillover effects are stronger in developing economies than in advanced countries, particularly through investment and output channels. Their findings suggest that external vulnerability and trade linkages significantly shape monetary spillovers. However, the study mainly focuses on financial indicators, including bond yields, equity markets, and capital flows, with limited attention to broader real sector dynamics.

Similarly, [Miranda-Agrippino and Rey \(2020\)](#) show that tighter US monetary policy reduces risky asset prices, constrains global credit, increases aggregate risk, and induces capital flow reversals across countries with different exchange rate regimes. Their study provides strong evidence for the existence of a global financial cycle but does not specifically investigate country-level transmission to broader macroeconomic indicators in emerging economies.

More recently, [Zehri \(2024\)](#) analyzes asymmetric US monetary policy spillovers across 17 inflation-targeting economies using VAR and GMM models. The results indicate that expansionary US monetary policy generates stronger contagion effects than tightening episodes, particularly through short-term interest rates and financial market variables. Nevertheless, their analysis remains primarily concentrated on financial market responses and does not explicitly incorporate forward-looking macroeconomic indicators. Taken together, these studies provide important evidence regarding the role of US monetary policy in shaping financial market outcomes. However, relatively limited empirical attention has been devoted to understanding how monetary spillovers simultaneously affect financial and real sectors, especially in emerging economies during the post-pandemic period.

[Ahmed et al. \(2026\)](#) examine how US monetary policy spillovers affect emerging market economies, emphasizing the role of domestic vulnerabilities and inflation expectation anchoring. Using evidence from 19 EMEs, the study finds that economies with weakly anchored inflation expectations experience larger output contractions, higher inflation, and stronger exchange rate depreciation following US monetary tightening. The findings highlight policy credibility and anchored inflation expectations as key factors in mitigating external monetary shocks.

[Ha \(2021\)](#) investigates the spillover effects of US monetary policy on the financial markets of five small open economies using a structural VAR model with external instruments. The results show that US monetary policy shocks exert stronger and more persistent effects on domestic financial markets than domestic monetary shocks, particularly through exchange rates, asset prices, and global financial sentiment. The study highlights the importance of international financial linkages and suggests that monetary policy independence in open economies may be constrained when domestic policy diverges from US monetary conditions.

Several pieces of evidence also confirm heterogeneous spillover effects across countries and transmission channels. [Degaspero et al. \(2026\)](#) find that US monetary policy spillovers differ according to domestic macroeconomic structures and financial openness. [Kim and Shin \(2021\)](#) show that US monetary policy significantly influences bond yields in Asian economies, emphasizing the importance of bond market transmission. In addition, studies focusing on China and inflation-targeting economies indicate that US monetary uncertainty affects macroeconomic and financial conditions through both conventional and unconventional channels ([Jiewei, 2022](#); [Ntshangase et al., 2023](#); [Ouyang et al., 2022](#)).

Research Gap and Positioning of the Present Study

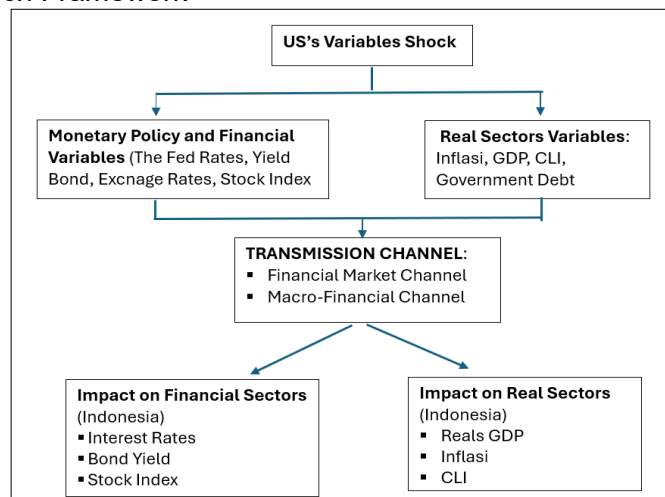
Despite the growing literature on US monetary policy spillovers, several important limitations remain. First, prior studies have predominantly focused on financial variables, such as exchange rates, stock prices, capital flows, and interest rates, while insufficient attention has been paid to the interaction between financial and real-sector dynamics, particularly in the post-pandemic environment characterized by heightened uncertainty. Second, much of the existing empirical evidence relies on cross-country analysis or advanced economies, thereby overlooking country-specific transmission mechanisms in emerging markets such as Indonesia, where structural characteristics, policy responses, and financial openness may produce different spillover patterns. Third, forward-looking indicators, particularly the CLI, remain largely underexplored in the monetary spillover literature despite their importance in capturing future economic expectations and cyclical turning points.

Accordingly, the novelty of this study lies in its integrated analysis of spillover effects across both financial and real sectors while incorporating the CLI as a forward-looking variable to better capture the broader macroeconomic transmission of US monetary policy shocks in Indonesia during the post-pandemic period. The CLI is designed to capture future economic turning points and forward-looking expectations regarding business cycle movements (Zhou et al., 2025).

Conceptual Framework

This study develops an integrated conceptual framework that explains how US monetary policy shocks are transmitted to Indonesia's economy through interconnected financial and real sector channels. Changes in US monetary policy, as reflected in the FFR, US government bond yields, US stock market performance, and US government debt conditions, are expected to affect Indonesia's financial sector through the interest rate channel, exchange rate channel, and asset price channel. These spillovers are reflected in domestic financial indicators, including Indonesia's overnight interest rate, government bond yield, exchange rate, and stock market performance. Subsequently, financial sector adjustments are expected to propagate into the real sector through changes in inflation, investment, and economic activity, which are represented by inflation, real GDP, government debt, and the CLI. Since the CLI captures expectations about future economic conditions, its inclusion provides a forward-looking perspective on how external monetary shocks shape macroeconomic dynamics. Figure 3 presents the conceptual framework of the expected transmission mechanism of US monetary policy spillovers to Indonesia's financial and real sectors.

Figure 3. Research Framework



RESEARCH METHOD

Data and Variables

This study examines the spillover effects of US economic and monetary shocks on Indonesia's financial and real sectors during the post-pandemic period. The analysis employs monthly data from January 2020 to December 2023, a period characterized by heightened global monetary uncertainty and stronger external transmission from advanced economies to emerging markets. To capture macro-financial spillovers, this study incorporates financial and real sector variables from both the US and Indonesia. Financial variables include overnight interest rates (O/N), nominal exchange rates, 10-year government bond yields, and stock market indices, while real sector variables consist of inflation, real GDP, CLI, and government debt. Additionally, several global variables are included to capture external shocks and global financial conditions, namely oil prices, commodity prices, and the Volatility Index (VIX). All variables are transformed into first differences to ensure stationarity and avoid spurious estimation problems commonly associated with macroeconomic time series. Monthly frequency is adopted to better capture short-term dynamic interactions and spillover mechanisms between US and Indonesian macroeconomic variables. The variables, measurement units, labels, and data sources are summarized in [Table 1](#).

Table 1. Variables, Labels, Units, and Data Sources

No.	Variable	Label	Unit	Source
Indonesia's Variables				
1	JCI (^JKSE)	si_ind	Index	finance.yahoo.com
2	IDR/USD	er_ind	Nominal Exchange rate	http://fx.sauder.ubc.ca/
4	Jakarta Interbank Offered Rate (O/N)	r_indns	Percent	http://www.bi.go.id/en/moneter/jibor/data-historis
8	ID GOVERNMENT BOND YIELD - 10 YEARS (EP) NADJ	B10Y_ind	Percent	investing.co.id
5	Indonesia's Inflation	Inf_Ind	Percent	www.bi.go.id
6	Indonesia's GDP Riel	Y_Ind	Billion USD	www.data.worldbank.org
7	Indonesia's CLI	CLI_Ind	Index	www.oecd.org
8	Indonesia's Government Debt	Govdebt_ind	%GDP	www.data.worldbank.org
USA's Variables				
9	Dowjones (^DJA)	si_usa	Index	finance.yahoo.com
10	USD/CHF(French Swiss)	er_usa	Nominal exchange rate	http://fx.sauder.ubc.ca/
11	US Fed Funds Eff Rate (D) –Middle Rate	r_usa	Percent	Thomson.Reuters
12	US CORP BONDS MOODYS SEASONED AAA - MIDDLE RATE	B10Y_usa	Percent	investing.co.id
13	USA's inflation	Inf_usa	Percent	www.bi.go.id
	USA's GDP Riel	Y-usa	Billion USD	www.data.worldbank.org
14	USA's CLI	CLI_USA	Index	www.oecd.org
15	USA's Government Debt	Govdebt_usa	%GDP	www.data.worldbank.org

Global Variables				
16	Oil Price	Oilprice	USD	investing.co.id
17	Commodity Index	ComIndex	Index	investing.co.id
18	VIX	VIX	Index	finance.yahoo.com

Model Specification

To examine the dynamic interdependence among variables, this study employs a VAR model. VAR is particularly suitable for analyzing spillover effects because it treats all variables as endogenous and captures feedback relationships among financial and real sector indicators across countries. The VAR model of order p is specified as:

$$Y_t = A + \sum_{k=1}^q B_k Y(t-k) + \varepsilon_t$$

where:

$Y_t = (n \times 1)$ vector of endogenous variables, including financial and real variables from the US and Indonesia

A = vector of intercept terms,

$B_k = (n \times n)$ coefficient matrix for lag k ,

p = the optimal lag length,

$\varepsilon_t = (n \times 1)$ vector of innovations assumed to be white noise.

For identification and interpretation of spillovers, the model adopts a block recursive structure:

$$U_t \rightarrow I_t$$

where US variables (U_t) are treated as contemporaneously exogenous to Indonesian variables (I_t). This ordering reflects the assumption that the US economy acts as an external source of shocks. In contrast, Indonesia, as a small open economy, responds to these shocks contemporaneously but exerts no immediate feedback effect on the US economy within the same period.

Estimation Procedure

The estimation procedure is conducted through several sequential stages to ensure the robustness and validity of the empirical results. First, the stationarity properties of all variables are examined using the Augmented Dickey-Fuller (ADF) unit root test. Since nonstationary time series can lead to spurious regression results, variables exhibiting unit roots are transformed into first differences to achieve stationarity and ensure reliable estimation. Following the stationarity test, the optimal lag length of the VAR model is determined using several information criteria, including the Akaike Information Criterion (AIC), Schwarz Bayesian Criterion (SC/BIC), and Hannan–Quinn Criterion (HQ). The selected lag structure is based on the model specification that minimizes these criteria while maintaining model parsimony and preserving the dynamic relationships among variables.

Subsequently, the stability of the VAR model is assessed using the inverse roots of the characteristic polynomial. The model is considered stable if all characteristic roots lie inside the unit circle (modulus < 1), ensuring that the estimated dynamic relationships are stable and suitable for further analysis. After establishing model stability, spillover effects are quantified using Forecast Error Variance Decomposition (FEVD) with a 12-month forecast horizon. FEVD decomposes the forecast error variance of each variable

into proportions attributable to shocks originating from other variables within the system. This approach enables the identification of the dominant sources of spillovers, the shock absorption capacity of domestic variables, and the relative importance of external versus internal disturbances in shaping Indonesia's macro-financial dynamics during the post-pandemic period.

RESULTS

Spillover of US Monetary Policy, Financial, and Real Variables on Indonesia's Financial Sector

Table 2. US Economic Spillover on the Indonesian Financial Sector

USA		r_ind	er_ind	b10Y_ind	si_ind	AVG Financial Sector Spillover
Monetary Policy	r_usa	4.70	9.44	5.56	7.66	6.84
Financial Variables	er_usa	9.99	7.66	7.50	6.50	7.91
	b10Y_usa	15.01	9.42	11.15	6.59	10.54
	si_usa	5.54	10.42	8.58	21.93	11.62
	(1)	8.81	9.23	8.20	10.67	9.23
						AVG Real Sector Spillover
Real Variables	inf_usa	5.87	5.26	2.91	3.37	4.35
	y_usa	3.58	7.55	7.86	6.56	6.39
	cli_usa	8.36	7.04	8.01	8.94	8.09
	govdebt_usa	2.53	20.98	5.99	19.99	12.37
Average	(2)	5.08	10.21	6.19	9.72	7.80
Grand average	(1)+(2)/2	6.95	9.72	7.20	10.19	8.51

Table 2 presents the spillover effects of US monetary policy, financial variables, and real variables on Indonesia's financial sector, including overnight interest rates (r_{ind}), exchange rates (ER_{ind}), 10-year government bond yields ($B10Y_{ind}$), and stock market performance (SI_{ind}). The results indicate that US financial variables generate the largest spillover effects on Indonesia's financial sector, with an average spillover value of 9.23%, exceeding the spillover contribution from US real sector variables (7.80%). This finding suggests that Indonesia's financial markets are more sensitive to US financial shocks than to changes in US macroeconomic fundamentals.

Among US financial variables, the largest spillover originates from the US stock market index (SI_{usa}), with an average spillover effect of 11.62%, followed closely by the US 10-year bond yield ($B10Y_{usa}$) at 10.54%. This result indicates that global financial market sentiment and bond market dynamics play dominant roles in influencing Indonesia's financial conditions. In contrast, the smallest spillover effect is generated by US inflation (INF_{usa}), with an average contribution of only 4.35%, implying a relatively weaker immediate transmission to Indonesia's financial market. At the domestic level, the Indonesian exchange rate (ER_{ind}) absorbs the largest spillover, with a grand average spillover value of 9.72%, followed by the stock market index (SI_{ind}) at 10.19%. These findings indicate that exchange rate dynamics and stock market performance are the most externally sensitive components of Indonesia's financial sector. Conversely, Indonesia's 10-year bond yield ($B10Y_{ind}$) records the smallest spillover absorption (7.20%), suggesting relatively lower external vulnerability compared to other financial indicators.

The grand average spillover value of 8.51% indicates that, on average, approximately 8.51% of fluctuations in Indonesia's financial sector are attributable to shocks originating from US macro-financial variables, confirming the existence of substantial cross-country spillover transmission. These findings directly support the study objective of identifying dominant US variables that influence Indonesia's macro-financial conditions during the post-pandemic period.

Spillover of US Monetary Policy, Financial, and Real Variables on Indonesia's Real Sector

Table 3. US Economic Spillover on Indonesian Real Sector

USA		inf_ind	y	cli	govdebt	AVG Financial Sector Spillover
Monetary Policy	r_usa	3.41	5.19	11.34	12.92	8.22
Financial Variables	er-usa	2.28	9.65	5.39	6.17	5.87
	b10Y_usa	8.59	7.67	8.26	8.45	8.24
	si_usa	4.54	3.26	8.55	11.76	7.03
Average		4.71	6.44	8.39	9.83	7.34
						AVG Real Sector Spillover
Real Variables	inf_usa	6.38	2.98	6.96	7.48	5.95
	y_usa	6.10	6.85	9.01	7.18	7.28
	cli_usa	6.40	9.06	9.04	3.83	7.08
	govdebt_usa	6.47	2.54	23.69	7.41	10.03
Average		6.34	5.36	12.18	6.47	7.59
Grand average		5.52	5.90	10.28	8.15	7.46

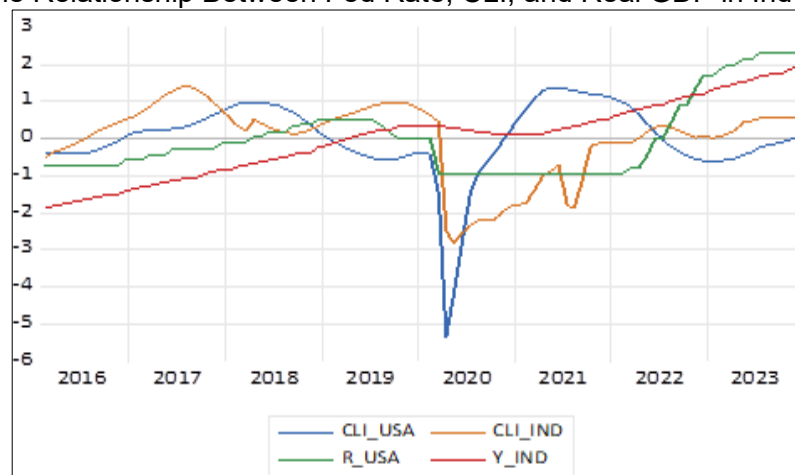
Table 3 reports the spillover effects of US monetary policy, financial variables, and real variables on Indonesia's real sector, including inflation (INF_{ind}), economic growth (Y_{ind}), the CLI (CLI_{ind}), and government debt ($GovDebt_{ind}$). Overall, the results show that the average spillover effect on Indonesia's real sector reaches 7.46%, which is lower than the spillover effect observed in the financial sector (8.51%). This finding suggests that Indonesia's financial variables respond more rapidly and strongly to US shocks, whereas real sector responses tend to be more gradual.

Among the US financial variables, the FFR (r_{usa}) generates the largest spillover effect, particularly on Indonesia's government debt (12.92%) and CLI (11.34%), indicating that US monetary tightening significantly affects future economic expectations and fiscal conditions in Indonesia. Meanwhile, the smallest spillover originates from the US exchange rate (ER_{usa}), particularly toward inflation (2.28%). Regarding US real variables, the largest spillover effect is generated by US government debt ($GovDebt_{usa}$), particularly toward Indonesia's CLI (23.69%), representing the highest spillover value in the entire table. This finding highlights the importance of US fiscal conditions in shaping expectations regarding Indonesia's future economic performance. By contrast, the smallest spillover effect is found between US GDP and Indonesia's inflation (2.98%), suggesting relatively limited direct transmission. From Indonesia's perspective, the CLI absorbs the largest spillover shocks, with a grand average spillover value of 10.28%, followed by government debt (8.15%), indicating that forward-looking economic expectations and fiscal conditions are the most externally sensitive real-sector indicators.

In contrast, Indonesia's inflation records the smallest spillover absorption (5.52%), suggesting relatively stronger domestic determinants of inflation during the study period.

These findings imply that US monetary and macro-financial conditions influence Indonesia not only through financial market channels but also through expectations and fiscal channels, thereby supporting the study's objective of examining spillover transmission across both financial and real sectors. Figure 4 illustrates the dynamic relationship between the US FFR (R_{USA}), the US CLI (CLI_{USA}), Indonesia's CLI (CLI_{IND}), and Indonesia's real GDP (Y_{IND}) during the post-pandemic period. The figure reveals a notable co-movement between changes in US monetary conditions and Indonesia's forward-looking economic indicators, particularly after the Federal Reserve initiated an aggressive monetary tightening cycle in 2022.

Figure 4. The Relationship Between Fed Rate, CLI, and Real GDP in Indonesia



A sharp decline in both CLI_{USA} and CLI_{IND} is observed during the COVID-19 shock in 2020, reflecting synchronized economic disruptions across countries. However, during the post-pandemic recovery period, Indonesia's CLI demonstrates stronger sensitivity to movements in the US economy and monetary policy than Indonesia's real GDP. While real GDP (Y_{IND}) follows a relatively smoother upward trend, CLI_{IND} exhibits greater fluctuations, particularly during periods of rising US interest rates. This pattern suggests that forward-looking economic expectations in Indonesia respond more rapidly to external monetary shocks than actual economic output. Furthermore, the increase in the FFR (R_{USA}) since 2022 coincides with a moderation in Indonesia's CLI, indicating that tighter US monetary policy may weaken expectations regarding future economic activity through financial tightening, exchange rate pressures, and lower investment sentiment. This visual evidence is consistent with the FEVD results presented in Table 2, where Indonesia's CLI records the largest spillover absorption (10.28%) among real sector variables, indicating that expectations regarding future economic performance are the most externally sensitive component of Indonesia's real sector.

Overall, Figure 4 supports the study objective by demonstrating that US monetary policy spillovers extend beyond financial markets and significantly influence Indonesia's real sector, particularly through the expectations channel represented by the CLI.

Figure 5. The Movement of US 10-Year Bond Yield with Inflation in Indonesia

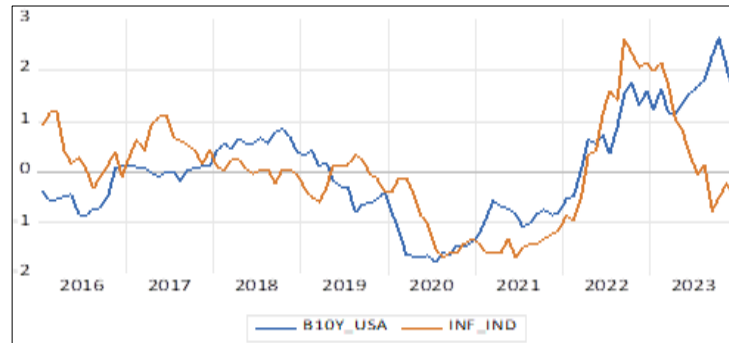


Figure 5 illustrates the dynamic relationship between the US 10-year government bond yield ($B10Y_{USA}$) and Indonesia's inflation (INF_{IND}) over the study period. The figure shows that movements in Indonesia's inflation tend to follow changes in US bond yields, particularly during periods of monetary tightening. Following the COVID-19 shock in 2020, both variables declined substantially, reflecting weak global demand and accommodative monetary conditions. However, beginning in 2021 and intensifying in 2022, a sharp increase in the US 10-year bond yield coincided with a significant rise in Indonesia's inflation, suggesting the presence of an external transmission mechanism from US financial conditions to domestic price dynamics. The upward movement in US bond yields during the post-pandemic tightening cycle likely reflects expectations of higher US interest rates and tighter global liquidity conditions. These developments may contribute to inflationary pressures in Indonesia through exchange rate depreciation, higher import costs, and increased prices of globally traded commodities, particularly energy and raw materials denominated in US dollars. The simultaneous upward trend observed in both variables during 2022–2023 provides visual evidence of stronger macro-financial interconnectedness between the US and Indonesia during periods of monetary tightening.

Nevertheless, the figure also suggests that the relationship is not perfectly synchronized, indicating the presence of domestic inflation determinants such as administered prices, domestic demand conditions, and supply-side shocks. This finding is consistent with the FEVD results in Table 2, where Indonesia's inflation absorbs a relatively modest spillover effect (5.52%), representing the smallest spillover absorption among Indonesia's real sector variables. Thus, while US bond market developments influence inflation dynamics in Indonesia, domestic factors continue to play a dominant role in shaping inflation outcomes. Overall, Figure 5 supports the study objective by showing that US financial variables, particularly the 10-year bond yield, serve as an important transmission channel affecting Indonesia's real sector, especially through the price channel represented by inflation.

Figure 6. Movement of Indonesia's Economic Growth with the US's CLI

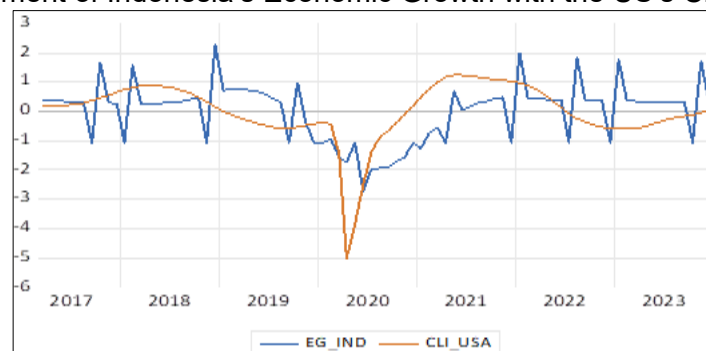


Figure 6 illustrates the movement of Indonesian economic growth (EG_IND) in comparison with the US CLI during the period 2017–2024. The graph shows that changes in the US CLI tend to be followed by fluctuations in Indonesia's economic growth, although the relationship does not always occur simultaneously and exhibits time-varying dynamics. During the pre-pandemic period (2017–2019), the US CLI moved relatively stably and was accompanied by moderate fluctuations in Indonesia's economic growth. However, a significant decline occurred in 2020, when both variables experienced sharp contractions, reflecting the global economic disruption caused by the COVID-19 pandemic.

Following the pandemic period, the US CLI gradually improved, indicating expectations of stronger economic activity in the US. At the same time, Indonesia's economic growth also showed a recovery trend, suggesting a possible transmission mechanism from improvements in US economic expectations to domestic economic performance. A rising US CLI reflects stronger economic prospects, which may increase global demand, including demand for Indonesian exports, thereby supporting domestic production and economic growth.

Moreover, an improving US economic outlook can influence international capital movements. When the US CLI signals favorable economic conditions, global investors often increase investment activities in emerging markets, including Indonesia, through both Foreign Direct Investment (FDI) and portfolio investment in stocks and government bonds. Increased capital inflows may support domestic liquidity, investment expansion, and business activities, which subsequently contribute to Indonesia's economic growth. Nevertheless, the graph also indicates that the relationship between the US CLI and Indonesian economic growth is not perfectly synchronized, implying that domestic macroeconomic conditions and external shocks also play important roles in shaping Indonesia's economic performance.

Figure 7. The Movement of Indonesian Government Debt with the Fed Interest Rate

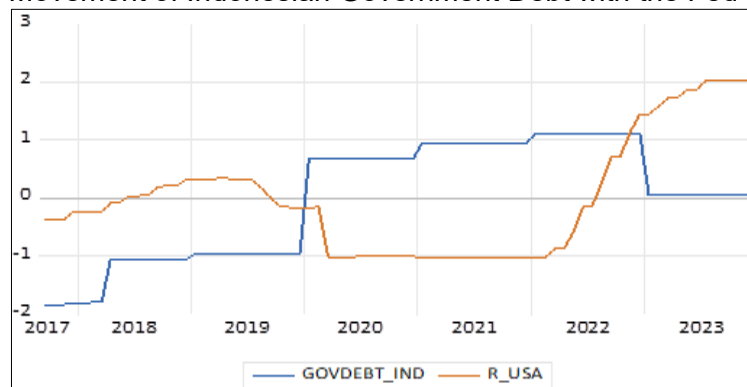


Figure 7 illustrates the movement of Indonesian government debt (GOVDEBT_IND) and the US FFR (R_USA) during 2017–2023. The figure suggests a changing relationship between Indonesia's government debt dynamics and US monetary policy conditions. During 2017–2019, when the US policy rate increased gradually, Indonesian government debt also showed an upward trend, indicating that domestic fiscal financing needs remained significant despite tighter global financial conditions. However, during the pandemic period (2020–2021), the FFR declined sharply as the US adopted accommodative monetary policies, while Indonesian government debt continued to increase substantially, likely reflecting expansionary fiscal measures aimed at economic stabilization and recovery.

Starting in 2022, the rapid increase in the FFR coincided with a moderation in Indonesian government debt growth. Rather than implying a direct causal relationship, this pattern may reflect the interaction between tighter global liquidity conditions, higher financing costs, and Indonesia's post-pandemic fiscal consolidation efforts. This finding is broadly consistent with previous literature suggesting that US monetary tightening is often associated with capital flow adjustments and increased financing pressures in emerging economies. At the same time, Indonesia's debt trajectory appears to be strongly influenced by domestic fiscal policy responses, particularly during crisis periods, indicating that global monetary spillovers interact with country-specific fiscal dynamics.

DISCUSSION

Spillover of US Monetary Policy, Financial, and Real Variables on Indonesia's Financial Sector

The results indicate that spillovers from US financial variables exert a stronger influence on Indonesia's financial sector than spillovers from US real variables, highlighting the dominant role of financial market transmission in the post-pandemic period. The larger contribution of US financial variables (9.23%) compared with US real variables (7.80%) suggests that Indonesia's financial markets are more responsive to changes in global financial conditions than to shifts in US macroeconomic fundamentals. This finding is consistent with the Global Financial Cycle framework, which emphasizes that US monetary policy affects emerging economies primarily through capital flows, risk appetite, and asset prices rather than through traditional trade channels (Miranda-Agrippino & Rey, 2020; Rey, 2015).

Similar evidence is reported by Ahmed & Zlate (2014) and Glebocki & Saha (2024), who document the sensitivity of emerging-market financial conditions to changes in US monetary policy and exchange rate dynamics. The findings are also consistent with Arbatli-Saxegaard et al. (2024), who show that developing economies in the Asia-Pacific region experience stronger spillover effects than advanced economies because of greater external vulnerability and stronger dependence on global financial conditions. Furthermore, Ha (2021) demonstrates that US monetary shocks exert larger and more persistent effects on domestic financial markets than domestic monetary policy shocks in small open economies, particularly through exchange rates and asset prices. This evidence supports the argument that Indonesia's financial sector remains highly exposed to global monetary and financial developments during periods of US policy normalization.

Among the US variables, the Dow Jones Industrial Average and the US 10-year Treasury yield emerge as the most important sources of spillovers. The strong influence of the US stock market reflects the role of global investor sentiment and portfolio rebalancing in shaping capital flows to emerging markets. Rising US equity valuations tend to attract international investors toward US assets, thereby affecting liquidity conditions and asset prices in Indonesia. Likewise, the significant spillover from US Treasury yields highlights the importance of the global interest rate channel. Changes in US long-term yields alter the relative attractiveness of emerging-market assets and influence exchange rates, sovereign borrowing costs, and domestic financial conditions. These findings support Kim and Shin (2021), who identify bond market transmission as a key channel linking US financial conditions to Asian economies. The result also aligns with the findings of Azad & Serletis (2020) and Camara (2025), who report that US monetary tightening generates substantial spillovers to exchange rates and financial markets across emerging economies. Their studies suggest that changes in US interest rates influence investor portfolio allocation decisions and international capital movements, thereby

amplifying the transmission of external shocks to domestic financial conditions. In this context, the prominent role of Treasury yields observed in this study further confirms the importance of interest rate differentials as a mechanism linking US monetary policy to emerging-market financial stability.

At the domestic level, the Jakarta Composite Index (JCI) and the rupiah exchange rate absorb the largest spillovers, indicating that equity and foreign exchange markets are the most externally sensitive segments of Indonesia's financial system. The strong responsiveness of the JCI suggests that Indonesian equity markets are highly integrated with global financial markets and rapidly incorporate changes in international investor sentiment. Meanwhile, the exchange rate remains particularly vulnerable to shifts in global liquidity and capital flows, reinforcing its role as a key transmission channel of external shocks. The relatively lower spillover absorption by Indonesia's 10-year government bond yield may reflect the increasing depth of the domestic bond market and the stabilizing role of monetary and macroprudential policies. The heterogeneous responses across Indonesian financial indicators are also consistent with [Degasperi et al. \(2026\)](#), who argue that the magnitude of US monetary spillovers depends on domestic financial structures, market depth, and the degree of financial openness. The relatively stronger response of the equity and foreign exchange markets compared with government bond yields suggests that external shocks are absorbed differently across financial market segments, reflecting variations in market integration and policy effectiveness. Overall, the findings suggest that post-pandemic spillovers from the US are transmitted predominantly through financial market channels, with stock prices, bond yields, and exchange rates serving as the primary conduits of transmission.

Spillover of US Monetary Policy, Financial, and Real Variables on Indonesia's Real Sector

The results reveal that spillovers to Indonesia's real sector are transmitted primarily through expectations, policy, and fiscal-risk channels. The significant influence of the FFR and the US CLI indicates that Indonesian macroeconomic performance is closely linked to changes in global monetary conditions and forward-looking economic expectations. In particular, the strong association between the US CLI and Indonesia's economic growth suggests that expectations regarding future global demand, trade prospects, and investment opportunities are rapidly incorporated into domestic economic activity. This finding supports the expectations-based transmission mechanism emphasized by [Aastveit et al. \(2017\)](#) and [Jurado et al. \(2015\)](#), who argue that uncertainty and expectations play an increasingly important role in shaping macroeconomic outcomes. The result further complements the evidence presented by [Ahmed et al. \(2026\)](#), who find that economies with weaker inflation-expectation anchoring experience larger macroeconomic disruptions following US monetary tightening. Their findings imply that expectations serve as a critical channel through which external monetary shocks influence domestic economic performance. The strong spillover observed from the US CLI to Indonesia's economic indicators therefore suggests that future expectations regarding global growth and monetary conditions play a central role in shaping domestic economic activity.

A notable finding is the dominant spillover from US government debt instruments to Indonesia's exchange rate, stock market, and CLI. Unlike traditional monetary channels, this result highlights the growing importance of fiscal-risk transmission in the post-pandemic period. Rising US government debt may increase Treasury issuance, alter global interest rate expectations, and encourage portfolio reallocation toward US assets. Such adjustments can generate capital outflows from emerging markets, weaken domestic currencies, and affect expectations regarding future economic activity. The

strong linkage between US government debt and Indonesia's CLI suggests that fiscal developments in the US influence not only financial markets but also expectations regarding Indonesia's future growth prospects. The findings further show that inflation is more closely associated with movements in US Treasury yields than with other US macroeconomic variables. This result suggests that global inflation expectations, commodity prices, and international financing conditions remain important determinants of domestic price dynamics. Moreover, the influence of US monetary and fiscal variables on Indonesia's real sector demonstrates that external shocks are increasingly transmitted through expectations and financial conditions rather than through conventional trade linkages alone. This pattern is consistent with recent literature emphasizing the growing role of macro-financial linkages in emerging economies. This evidence is broadly consistent with [Jiewei \(2022\)](#), [Ntshangase et al. \(2023\)](#), and [Ouyang et al. \(2022\)](#), who find that uncertainty surrounding US monetary policy affects both financial and macroeconomic outcomes through conventional and unconventional transmission channels. Their studies suggest that external shocks increasingly operate through expectations, confidence, and financial market adjustments rather than solely through trade-related mechanisms. The substantial spillovers from US government debt and Treasury yields identified in this study provide additional support for the growing importance of these macro-financial channels in emerging-market economies.

Taken together, the results indicate that the transmission of US shocks to Indonesia's real sector extends beyond traditional monetary channels and increasingly operates through expectations, fiscal risk, and financial market mechanisms. The prominence of the CLI highlights the importance of forward-looking indicators in capturing external vulnerabilities, suggesting that policymakers should strengthen early-warning systems and closely monitor global financial and macroeconomic developments. Such measures are essential for enhancing macroeconomic resilience and mitigating the adverse effects of future external shocks. An important implication of these findings is that the dominant transmission channels differ across sectors. While Indonesia's financial sector is primarily affected through asset price, exchange rate, and bond yield channels, the real sector is more responsive to expectations, fiscal risk, and forward-looking indicators. This asymmetry suggests that US monetary policy spillovers operate through a broader macro-financial transmission mechanism in which financial market adjustments precede and subsequently influence real economic activity. Therefore, understanding the interaction between financial and real sector spillovers is crucial for designing integrated monetary and macroprudential policies in emerging economies.

CONCLUSION

This study aims to examine the spillover effects of US monetary policy, financial, and real variables on Indonesia's financial and real sectors and to identify the dominant transmission channels. The findings reveal that spillovers from the US are predominantly transmitted through financial market channels, with spillovers from US financial variables exceeding those from real variables. The DJIA and US 10-year Treasury yield emerge as the strongest financial spillover sources, while US government debt instruments, particularly T-Bills, represent the most influential real-sector transmission factor. On the Indonesian side, the JCI absorbs the highest spillover among financial variables, while Indonesia's CLI receives the strongest spillover from US government debt, highlighting the importance of expectations and macro-financial linkages. In addition, Indonesia's government debt is most strongly associated with the US policy rate, while real GDP is more closely linked to the US CLI, reflecting the relevance of global demand and expectations channels.

Theoretically, this study contributes to the spillover literature by integrating financial and real-sector variables and identifying dominant transmission mechanisms in the post-pandemic period, including financial, expectations, fiscal risk, output, and price channels. Practically, the findings suggest that Indonesia's macroeconomic resilience should prioritize strengthening the financial market channel, particularly exchange rate stability, bond market resilience, and investor confidence. Policymakers, especially the government and Bank Indonesia, should also enhance monitoring of forward-looking global indicators, such as the US CLI and Treasury yields, as part of an early-warning system to mitigate external vulnerabilities arising from global macro-financial interconnectedness.

LIMITATION

This study is limited to selected US monetary, financial, and real variables within the post-pandemic period and identifies spillover linkages rather than strict causal relationships. In addition, other external factors, such as geopolitical risk and global uncertainty, are not included. Future research may extend the observation period, incorporate broader global variables, and apply alternative econometric approaches to better capture evolving spillover dynamics.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to Universitas Katolik Indonesia Atma Jaya Jakarta, particularly the Faculty of Business and Social Innovation (FBIS), for providing academic support and research facilities.

DECLARATION OF CONFLICTING INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. The authors also confirm that there are no conflicts of interest with any individual, institution, or organization related to this study.

REFERENCES

- Aastveit, K. A., Natvik, G. J., & Sola, S. (2017). Economic uncertainty and the influence of monetary policy. *Journal of International Money and Finance*, 76, 50-67. <https://doi.org/10.1016/j.jimonfin.2017.05.003>
- Ahmed, S., & Zlate, A. (2014). Capital flows to emerging market economies: A brave new world?. *Journal of International Money and Finance*, 48, 221-248. <https://doi.org/10.1016/j.jimonfin.2014.05.015>
- Ahmed, S., Akinci, O., & Queralto, A. (2026). U.S. monetary spillovers to emerging markets: Both policy drivers and vulnerabilities matter. *Journal of International Economics*, 104288. <https://doi.org/10.1016/j.jinteco.2026.104288>
- Arbatli-Saxegaard, E. C., Furceri, D., Dominguez, P. G., Ostry, J. D., & Peiris, S. J. (2024). Spillovers from US monetary policy: Role of policy drivers and cyclical conditions. *Journal of International Money and Finance*, 143, 103053. <https://doi.org/10.1016/j.jimonfin.2024.103053>
- Aslam, A. (2026). Oil shock spillovers in emerging markets: Sectoral dynamics of demand, supply, and risk channels. *International Economics*, 100682. <https://doi.org/10.1016/j.inteco.2026.100682>
- Azad, N. F., & Serletis, A. (2020). Monetary policy spillovers in emerging economies. *International Journal of Finance & Economics*, 25(4), 664-683. <https://doi.org/10.1002/ijfe.1773>

- Bräuning, F., & Ivashina, V. (2020). US monetary policy and emerging market credit cycles. *Journal of Monetary Economics*, 112, 57-76. <https://doi.org/10.1016/j.jmoneco.2019.02.005>
- Bruno, V., & Shin, H. S. (2015). Capital flows and the risk-taking channel of monetary policy. *Journal of Monetary Economics*, 71, 119-132. <https://doi.org/10.1016/j.jmoneco.2014.11.011>
- Camara, S. (2025). Spillovers of us interest rates: Monetary policy & information effects. *Journal of International Economics*, 154, 104059. <https://doi.org/10.1016/j.jinteco.2025.104059>
- Cao, J., Dinger, V., Gómez, T., Gric, Z., Hodula, M., Jara, A., ... & Terajima, Y. (2023). Monetary policy spillover to small open economies: Is the transmission different under low interest rates?. *Journal of Financial Stability*, 65, 101116. <https://doi.org/10.1016/j.jfs.2023.101116>
- Chen, Q., Filardo, A., He, D., & Zhu, F. (2016). Financial crisis, US unconventional monetary policy, and international spillovers. *Journal of International Money and Finance*, 67, 62-81. <https://doi.org/10.1016/j.jimonfin.2015.06.011>
- Dedola, L., Rivilta, G., & Stracca, L. (2017). If the Fed sneezes, who catches a cold?. *Journal of International Economics*, 108, S23-S41. <https://doi.org/10.1016/j.jinteco.2017.01.002>
- Dées, S., & Galesi, A. (2021). The global financial cycle and US monetary policy in an interconnected world. *Journal of International Money and Finance*, 115, 102395. <https://doi.org/10.1016/j.jimonfin.2021.102395>
- Degasperi, R., Hong, S. S., & Ricco, G. (2026). The global transmission of U.S. monetary policy. *Journal of International Economics*, 104259. <https://doi.org/10.1016/j.jinteco.2026.104259>
- Engler, P., Piazza, R., & Sher, G. (2023). *World Economic Outlook: Spillover Effects from the U.S. Economy on Emerging Markets*. International Monetary Fund (IMF).
- Glebocki, H., & Saha, S. (2024). Global uncertainty and exchange rate conditions: Assessing the impact of uncertainty shocks in emerging markets and advanced economies. *Journal of International Financial Markets, Institutions and Money*, 96, 102060. <https://doi.org/10.1016/j.intfin.2024.102060>
- Ha, J. (2021). Financial market spillovers of U.S. monetary policy shocks. *Review of International Economics*, 29(5), 1221–1274. <https://doi.org/10.1111/roie.12542>
- Iacoviello, M., & Navarro, G. (2019). Foreign effects of higher US interest rates. *Journal of International Money and Finance*, 95, 232-250. <https://doi.org/10.1016/j.jimonfin.2018.06.012>
- International Monetary Fund (IMF). (2023). *World Economic Outlook: Navigating Global Divergences*. International Monetary Fund (IMF).
- Jiewei, G. (2022). Spillover effect of American monetary policy on China after the subprime mortgage crisis, based on the Mundell-Fleming-Dornbusch Model. *The Economics and Finance Letters*, 9(1), 1-15. <https://doi.org/10.18488/29.v9i1.2905>
- Jurado, K., Ludvigson, S. C., & Ng, S. (2015). Measuring uncertainty. *American Economic Review*, 105(3), 1177-1216.
- Kim, S., & Shin, H. S. (2021). Offshore EME bond issuance and the transmission channels of global liquidity. *Journal of International Money and Finance*, 112, 102336. <https://doi.org/10.1016/j.jimonfin.2020.102336>
- Li, Y., Wang, X., & Yu, J. (2025). FOEs and the transmission of US monetary policy shocks: Evidence from China. *Journal of International Money and Finance*, 103497. <https://doi.org/10.1016/j.jimonfin.2025.103497>
- Lin, T., Liu, L., & Liang, X. (2025). US monetary policy and capital flows to emerging markets: The role of capital controls in financial stability. *Sustainability*, 17(24), 11369. <https://doi.org/10.3390/su172411369>

- Miranda-Agrippino, S., & Rey, H. (2020). US monetary policy and the global financial cycle. *The Review of Economic Studies*, 87(6), 2754-2776. <https://doi.org/10.1093/restud/rdaa019>
- Ntshangase, L. S., Zhou, S., & Kaseeram, I. (2023). The spillover effects of US unconventional monetary policy on inflation and non-inflation targeting emerging markets. *Economies*, 11(5), 138. <https://doi.org/10.3390/economies11050138>
- Obstfeld, M. (2019). *Global Dimensions of US Monetary Policy* (No. w26039). National Bureau of Economic Research.
- Ouyang, Z., Dou, Z., Wei, L., & Vasa, L. (2022). Nonlinear spillover effect of US monetary policy uncertainty on China's systematic financial risks. *Journal of Business Economics and Management*, 23(2), 364-381. <https://doi.org/10.3846/jbem.2022.16065>
- Rey, H. (2015). *Dilemma Not Trilemma: The Global Financial Cycle and Monetary Policy Independence* (No. w21162). National Bureau of Economic Research.
- Rogers, J., Sun, B., & Wu, W. (2025). Drivers of the global financial cycle. *Journal of International Economics*, 104088. <https://doi.org/10.1016/j.jinteco.2025.104088>
- Suripto, S., Novayadi, N., Sukarniati, L., & Kurniawan, M. L. A. (2023). Analysis of factors affecting foreign exchange reserves in Indonesia (2017–2021). *International Journal of Applied Business and International Management*, 8(3), 376–396. <https://doi.org/10.32535/ijabim.v8i3.2462>
- Umar, H. B., & Kespo, M. J. (2024). Credit restructuring policy and its impact on banking financial performance: Case study at Bank in Papua. *International Journal of Applied Business and International Management*, 9(3), 448–463. <https://doi.org/10.32535/ijabim.v9i3.3597>
- Zehri, C., Madjd-Sadjadi, Z., & Ammar, L. S. I. (2024). Asymmetric impacts of US monetary policy on emerging markets: Contagion and macroeconomic determinants. *The Journal of Economic Asymmetries*, 29, e00354. <https://doi.org/10.1016/j.jeca.2024.e00354>
- Zhang, M., Sensoy, A., Cheng, F., & Zhao, X. (2022). Three channels of monetary policy international transmission: Identifying spillover effects from the US to China. *Research in International Business and Finance*, 61, 101670. <https://doi.org/10.1016/j.ribaf.2022.101670>
- Zhou, F., Shi, K., Chen, W., & Xu, N. (2025). Business-cycle risk exposure and the cross-sectional returns in China's A-share market. *Emerging Markets Finance and Trade*, 1-19. <https://doi.org/10.1080/1540496X.2025.2600685>

ABOUT THE AUTHOR

1st Author

Nuning Trihadmini is a full-time lecturer and researcher at the Master of Applied Economics Program, School of Business and Social Innovation, Atma Jaya Catholic University of Indonesia (Unika Atma Jaya Jakarta). She obtained her Bachelor's degree in Development Economics from Universitas Sebelas Maret (UNS), Surakarta. She then earned her Master's degree in Economics from the Faculty of Economics and Business, Universitas Indonesia, with a specialization in Banking and Monetary Economics. She completed her Doctoral degree at the same institution (FEB-UI), majoring in International Finance. Her research interests include international finance, monetary economics, financial markets, and macro-financial linkages, with a particular focus on spillover effects and global economic dynamics. Currently, she serves as a faculty member and actively engages in research and academic development within her field.

Email: nuning.trihadmini@atmajaya.ac.id or nuningtrihad@gmail.com

ORCID ID: <https://orcid.org/0000-0002-7594-6576>

2nd Author

R. Mahelan Prabantarikso is a senior Indonesian financial sector professional with extensive experience in banking, risk management, compliance, and corporate governance. He earned his Bachelor's degree in Economics from Universitas Jenderal Soedirman, a Master of Business Administration (MBA) from the Faculty of Economics and Business, Universitas Gadjah Mada, a Master's degree in Law from the Faculty of Law, Universitas Indonesia, and a Doctoral degree from Institut Pertanian Bogor (IPB University). His core competencies include Enterprise Risk Management (ERM), banking and insurance risk management, regulatory compliance, corporate governance, strategic management, organizational transformation, and financial sector policy. He holds several professional certifications in risk management, governance, compliance, and banking, and is actively involved in professional, academic, and executive development activities within Indonesia's financial services sector.