

Analysis Impact of the Pruning Policy Budget Government to Volatility Composite Stock Price Index (IHSG): Approach Autoregressive Distributed Lag (ARDL), Vector Autoregression (VAR), and Granger Causality

Lusiana Sandra Oey^{1*}, Yoyo Sudaryo², Nunung Ayu Sofiati³, Andre Suryaningprang⁴, Riyandi Nur Sumawidjaja⁵

^{1,2,3,4,5} Master of Management Study Program, Faculty Management and Business, University of Indonesia Building (INABA), Bandung, Indonesia

* Corresponding Author: lusianasandra@student.inaba.ac.id

Article History

Received: 22-07-2026

Revised: 26-07-2026

Published: 30-07-2026

Keywords: Government Budget Cuts; IHSG Volatility; Fiscal Policy; Autoregressive Distributed Lag (ARDL); Vector Autoregression (VAR); Granger Causality

ABSTRACT

Contractionary fiscal policy through government budget cuts, as mandated by Presidential Instruction Number 1 of 2025 with a spending efficiency value of Rp306.69 trillion, has the potential to influence investor expectations and the stability of the Indonesian capital market. This study aims to analyze the effect of government budget cut policy implementation, proxied through state expenditure realization, on the volatility of the Indonesia Composite Stock Price Index (IHSG), in both the short run and the long run, and to examine the dynamic responses and causal direction alongside the policy interest rate, exchange rate, and the ASEAN regional stock index. The study uses monthly time-series secondary data from January 2018 to December 2025 (96 observations), analyzed using the Autoregressive Distributed Lag (ARDL) Bounds Test and Error Correction Model (ECM) for short-run and long-run relationships, the Vector Autoregression (VAR) model as the basis for Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD), and the Granger Causality Test to determine the direction of causality. The results show a significant long-run cointegrating relationship (Bounds Test F-statistic = 4.6428 > I(1) Bound at $\alpha=5\%$). State expenditure realization has a significant positive effect on IHSG volatility in the short run, but a negative effect significant at the 10% level in the long run, indicating a pattern in which short-run shocks reverse into a long-run stabilizing effect. The policy interest rate has a significant positive long-run effect, the exchange rate has a significant positive short-run effect, while the ASEAN regional index is not significant. An Error Correction Term of -0.5615 indicates an adjustment speed of 56.15% per month, and state expenditure realization is shown to be the largest external contributor (5.50%) to the variation in IHSG volatility and to have a unidirectional causal relationship with it.

INTRODUCTION

The capital market is one of the instrument main in a functioning modern economy as means fund mobilization, distribution risks, as well as indicator health economy a country (Tandelilin, 2017). Composite Stock Price Index (IHSG), as indicator main Indonesian stock market, not only reflect change price shares, but also represents investor sentiment and expectations regarding condition macroeconomics and policy government. IHSG fluctuations can understood as reaction collective market players towards dynamics economy domestic both domestically and globally (Mankiw, 2021), making the JCI an important barometer in analyze relatedness between policy fiscal and capital market performance.

Policy fiscal, in particular through instrument shopping government, has role strategic in influence economy and capital markets. Policy fiscal expansive viewed capable increase request aggregate and provide economic stimulus (Keynes, 1936), whereas policy fiscal contractive in the form of pruning potential budget *cut* pressing activity economy and give rise to reflected uncertainty in IHSG movement. International studies show that pruning shopping can lower growth term short. However strengthen credibility fiscal term long (Alesina, Favero, & Giavazzi, 2019; Ardagna, 2004), while financial markets generally respond significant every consolidation fiscal large (Chatziantoniou, Duffy, & Filis, 2013).

In Indonesia, the implementation policy efficiency state spending as mandated in Instructions President Number 1 of 2025 with mark efficiency estimated at Rp . 306.69 trillion (Ministry of Finance of the Republic of Indonesia, 2024) cause mixed responses from market players, because potential influence expectation to growth economy, performance corporate, and level risk investment. Research previously about IHSG volatility is still Lots focuses on the GARCH or VAR approach which emphasizes dynamics term short (Nurjanah, Azzahra, Mulia, Delviro, & Panorama, 2023; Tsalisati, 2024), so that Not yet in a way adequate explain whether influence policy fiscal towards the capital market is temporary or continue until term long. Approach *Autoregressive Distributed Lag (ARDL)* own superiority estimate connection term short and long term long in a way simultaneously, as well as can used on variables with degrees integration mixture $I(0)$ and $I(1)$ during No there is variables $I(2)$ (Pesaran, Shin, & Smith, 2001; Adekoya, Oliyide, et al., 2020), making it relevant For analyze mechanism transmission policy fiscal to IHSG volatility in general more comprehensive.

Based on description said, research This aim to : (1) analyze influence implementation policy pruning budget government, which is proxied through realization state spending, against IHSG volatility ; (2) analyzing connection term short and long term long between implementation policy pruning budget government, benchmark interest rate, value exchange, index ASEAN regional stocks, and IHSG volatility ; (3) analyzing response dynamic and contribution shock implementation policy pruning budget government as well as variables macroeconomics to IHSG volatility; and (4) analyzing direction connection causality between

implementation policy pruning budget government, variables macroeconomics, and IHSG volatility.

Based on study theory and research previous research This developed five hypotheses : H1, implementation policy pruning budget government (ln_ANGG) has an influence to IHSG volatility in term short and long term length ; H2, Bank Indonesia's benchmark interest rate (BI_RATE) has an effect to IHSG volatility in term short and long term length ; H3, value Rupiah exchange rate against the United States Dollar (ln_KURS) has an effect to IHSG volatility in term short and long term length; H4, index ASEAN regional shares (ln_REGIONAL) are influential to IHSG volatility in term short and long term length ; and H5, there is connection causality between implementation policy pruning budget government and IHSG volatility. New study This lies in the use realization state spending as proxy quantitative policy pruning budget, combined with ARDL-ECM, VAR (IRF-FEVD), and Granger Causality approaches integrated , so that capable catch dynamics transmission policy fiscal to capital market volatility in general more comprehensive compared to research previously generally only emphasize one dimensions time.

RESEARCH METHODS

Study This use approach quantitative with monthly time series secondary data period January 2018 to with December 2025, a total of 96 observations . Variable study consists of on IHSG volatility (VOL_IHSG), which is calculated through *rolling standard deviation* from daily *returns* Logarithmic IHSG ($R_t = \ln(\text{Closet}/\text{Closet}-1)$); realization state expenditure (ln_ANG) as proxy policy pruning budget, sourced from the Ministry of Finance of the Republic of Indonesia; Bank Indonesia's benchmark interest rate (BI_RATE); the value Rupiah exchange rate against the United States Dollar (ln_KURS); and the index MSCI ASEAN regional stocks (ln_REGIONAL). Variable ln_ANGG, ln_KURS, and ln_REGIONAL transformed to in form natural logarithm for standardize scale and stabilize data variance . Before estimation , done inspection data consistency , identification *missing values* , and outlier detection using Interquartile Range (IQR) and Z-score methods.

All over variables tested stationarity use *Augmented Dickey-Fuller (ADF) test* For avoid regression impudent . Remembering variables study own degrees integration mixture I(0) and I(1), analysis connection term short and long term long done use approach *Autoregressive Distributed Lag (ARDL) Bounds Test* (Pesaran , Shin, & Smith, 2001), continued with *Error Correction Model (ECM)* For measure dynamics term short and fast adjustment (*speed of adjustment*) towards balance term long through coefficient *Error Correction Term (ECT)*. Next, the *Vector Autoregression (VAR) model* (Sims, 1980) was used. as base analysis *Impulse Response Function (IRF)* and *Forecast Error Variance Decomposition (FEVD)* For describe dynamics response and contribution shock between variables, whereas *Granger Causality Test* (Granger, 1969) was used For test direction connection causality between policy pruning budget and volatility of the IHSG. All estimate done use device EViews 13 software.

RESULTS AND DISCUSSION

Data Consistency and Statistics Descriptive

Inspection data consistency across 96 observations monthly show No there are missing values in the fifth variables research . Outlier detection using method *Interquartile Range (IQR)* and *Z-score* find six period mark extreme on VOL_IHSG, namely March-April 2020 and September 2020 (beginning and wave second COVID-19 pandemic), May 2022 (increase aggressive global interest rates), and March-April 2025 (period implementation Presidential Instruction No. 1/2025 together with shock rates global trade). All mark the maintained Because reflect real market conditions , not error data recording .

Stationarity Test (Unit Root Test)

All over variables tested stationarity use *Augmented Dickey-Fuller (ADF)* test with *Individual Intercept and Trend* and lag automatic based on *Schwarz Information Criterion (SIC)* . Test results presented in Table 1.

Table 1. Unit Root Test Results (ADF Test)

Variables	<i>t</i> -Stat Level	Prob. Level	<i>t</i> -Stat 1st Diff	Prob. 1st Diff	Degree of Integration
ln_ANGG	-5.7544	0.0000	-	-	I(0)
VOL_IHSG	-6.4277	0.0000	-	-	I(0)
BI_RATE	-2,0188	0.5833	-5,0186	0.0004	I(1)
ln_CURS	-4,0567	0.0100	-	-	I(0)*
ln_REGIONAL	-1.7371	0.7270	-10,3858	0.0000	I(1)

Source : EViews output, processed (2026). * ln _KURS borderline: significant at Prob.=0.0100 ($\alpha=5\%$).

Variables ln_ANGG , VOL_IHSG, and ln_KURS stationary at level or I(0), while BI_RATE and ln_REGIONAL stationary after *first difference* or I(1). Condition degrees integration mixture this , without There is variables integrated in I(2), making approach *ARDL Bounds Test* (Pesaran , Shin, & Smith, 2001) as the most appropriate method used , different with Johansen's approach requires all over variables integrate to the same degree .

Estimation and Cointegration Test (Bounds Test)

Based on criteria *Akaike Information Criterion (AIC)* with maximum lag 4 and evaluation of 2,500 model combinations, the ARDL(2,2,0,2,0) model was selected as the best model with VOL_IHSG as variables dependent (*R-squared* =0.4448; *Adjusted R-squared* =0.3779; *F-statistic* =6.6485; Prob.=0.0000; *Durbin-Watson* =2.0416, indicating No There is autocorrelation serious). *Bounds Test Results* presented in Table 2.

Table 2. Results of the ARDL Bounds Test Cointegration Test

Statistics	1%	2.5%	5%	10%
F-statistic	4.6428	4.6428	4.6428	4.6428
I(0) Bound (Lower)	3,602	2,449	2,688	2,303
I(1) Bound (Upper)	4,787	3,298	3,698	3,220
Conclusion	Inconclusive	There is Cointegration	There is Cointegration	There is Cointegration

Source : EViews output, processed (2026). Critical value Pesaran , Shin, & Smith (2001).

In level significance 5%, value *F-statistic* (4.6428) exceeds I(1) Bound (3.698), so H_0 is not existence connection term long rejected . This is confirm there is connection balance term length (cointegration) between policy pruning budget , IHSG volatility , benchmark interest rate , value exchange and index regional shares , so that estimate can continued on the coefficient term length and *Error Correction Model (ECM)* , answer objective study second .

Coefficients and Error Correction Model (ECM)

Table 3. Long-Term Coefficients (Cointegrating Relation)

Variables	Coefficient	t-Statistic	Prob.
LN_ ANGG(-1)	-0.002356	-1.9496	0.0544
BI_RATE	0.001894	2,4510	0.0162
LN_ EXCHANGE(-1)	0.007437	0.5314	0.5965
LN_REGIONAL	0.004929	0.8720	0.3855

Source : EViews output, processed (2026).

Of the four variables independent , only BI_RATE has an effect significant against VOL_IHSG in term length (Prob.=0.0162). Coefficient ln_ANGG worth negative However be at the level significance of 10% (Prob.=0.0544), whereas ln_KURS (Prob.=0.5965) and ln_REGIONAL (Prob.=0.3855) do not significant.

Table 4. Error Correction Model (ECM) - Coefficients Short -term

Variables	Coefficient	t-Statistic	Prob.
COINTEQ(-1) / ECT	-0.5615	-5.4346	0.0000
D(VOL_ IHSG(-1))	-0.1780	-1.8697	0.0649
D(LN_ ANGG)	-0.0004	-0.9085	0.3661
D(LN_ ANGG(-1))	0.0010	2,0731	0.0411
D(LN_CURS)	0.0820	4,7320	0.0000

Variables	Coefficient	t-Statistic	Prob.
D(LN_ URSE(-1))	0.0617	3,2710	0.0015

Source : EViews output, processed (2026). $R\text{-squared}=0.5498$; $\text{Adj. } R\text{-squared}=0.5242$; $F\text{-statistic}=21.4945$; $\text{Prob.}=0.0000$.

Error Correction Term (ECT) Value of -0.5615 and significant ($\text{Prob.}=0.0000$) indicates that approximately 56.15% deviation from balance term length of period previously corrected in One month , indicating that the Indonesian capital market is adjusting self in a way relatively fast . In term short , D(ln_ ANGG (-1)) effect positive significant ($\text{Prob.}=0.0411$) while D(ln_ANGG) period walk No significant ($\text{Prob.}=0.3661$), indicating the market responded change realization state spending with pause time One month . D(ln_KURS) and D(ln_KURS (-1)) have an effect positive and highly significant ($\text{Prob.}=0.0000$ and 0.0015), indicating weakening of the Rupiah direct increase IHSG volatility in term short.

Estimate Vector Autoregression (VAR) and Stability Test

As analysis complement For answer objective study Third , the Vector Autoregression (VAR) model estimated use variables that have been customized stationarity (BI_RATE and ln_REGIONAL in first difference form). Based on the VAR Lag Order Selection Criteria with maximum lag 4, all criteria information (LR, FPE, AIC, SC, HQ) in consistent recommend lag 1. Estimated VAR model with lag 1 stated stable based on inspection *Inverse Roots of AR Characteristic Polynomial* , with whole root modulus characteristics be under one (highest modulus 0.951971; no There is roots outside the unit circle), so that worthy used For IRF and FEVD analysis.

Analysis Impulse Response Function (IRF)

IRF analysis describes response dynamic VOL_IHSG against shock One standard deviation in each variable , using method *Cholesky One SD (df adjusted) Innovations* with ordering VOL_IHSG, LN_ANGG, D(BI_RATE), LN_KURS, D(LN_REGIONAL). Complete results presented in Table 5.

Table 5. VOL_IHSG response to Shock (Impulse Response Function)

Period	Shock VOL_IHSG	Shock ln_ANGG	Shock D(BI_RATE)	Shock ln_CURS	Shock D(ln_REGIONAL)
1	0.004613	0.000000	0.000000	0.000000	0.000000
2	0.001712	-0.000794	-0.000157	0.000272	-0.000336
3	0.000578	-0.000730	-0.000048	0.0000564	-0.0000320
4	0.000211	-0.000452	0.0000239	-0.00000955	0.0000157
5	0.0000772	-0.000244	0.0000475	-0.0000338	0.0000164

Period	Shock VOL_IHSG	Shock ln_ANGG	Shock D(BI_RATE)	Shock ln_CURS	Shock D(ln_REGIONAL)
6	0.0000257	-0.000119	0.0000458	-0.0000420	0.00000914
7	0.00000611	-0.0000515	0.0000354	-0.0000436	0.00000276
8	-0.000000451	-0.0000179	0.0000243	-0.0000426	-0.00000143
9	-0.00000187	-0.00000236	0.0000154	-0.0000407	-0.00000385
10	-0.00000149	0.00000403	0.00000910	-0.0000385	-0.00000509

Source : EViews output, processed (2026).

VOL_IHSG response to shock himself Alone highest in the period first (0.004613) and convergent going to zero in the 10th period, indicating characteristic consistent (*mean-reverting*) transient with ECT value. Shock on ln_ANGG responded to negative by VOL_IHSG starting 2nd to 9th periods, indicating effect stabilization term one - way medium with coefficient term length . Shocks to D(BI_RATE) and D(ln_REGIONAL) result in response magnitude small and not consistent direction, whereas shock ln_CURS turn around from positive become negative after period second.

Forecast Error Variance Decomposition (FEVD)

FEVD measures contribution of each variable in explain variation VOL_IHSG *forecast error at various horizons*. Full results presented in Table 6.

Table 6. Variance Decomposition of VOL_IHSG

Period	VOL_IHSG (%)	ln_ANGG (%)	D(BI_RATE) (%)	ln_RATE (%)	D(ln_REGIONAL) (%)
1	100,0000	0.0000	0.0000	0.0000	0.0000
2	96.6373	2,5186	0.0980	0.2963	0.4499
3	94,6671	4,4921	0.1036	0.2986	0.4387
4	93.9325	5,2313	0.1048	0.2960	0.4354
5	93,7083	5.4437	0.1131	0.2996	0.4353
6	93.6440	5,4936	0.1210	0.3061	0.4353
7	93.6233	5,5024	0.1258	0.3133	0.4352
8	93.6136	5,5031	0.1280	0.3202	0.4352
9	93,6068	5,5027	0.1289	0.3264	0.4352

Period	VOL_IHSG (%)	ln_ANGG (%)	D(BI_RATE) (%)	ln_RATE (%)	D(ln_REGIONAL) (%)
10	93,6010	5,5024	0.1292	0.3321	0.4353

Source : EViews output, processed (2026). Cholesky method (df adjusted) Factors.

More of 93% variation IHSG volatility is explained by internal market factors Alone until 10th period , while between variables external , ln_ANGG is contributor the largest (5.50%), far beyond ln_CURS (0.33%), D(ln_REGIONAL) (0.44%), and D(BI_RATE) (0.13%). Findings This confirm that among variables macroeconomic and fiscal policies studied pruning budget own most prominent role in explain dynamics IHSG volatility , answer objective study third.

Granger Causality Test

Granger Causality Test was performed with lag 1 for answer objective study fourth about direction connection causality between variables. Results for relevant pair with VOL_IHSG presented in Table 7.

Table 7. Results of the Pairwise Granger Causality Test

Hypothesis (H0)	F-Statistic	Prob.	Conclusion ($\alpha=5\%$)
ln_ANGG no Granger Cause VOL_IHSG	3,29182	0.0729	Significant at $\alpha=10\%$
VOL_IHSG does not Granger Cause ln_ANGG	0.05911	0.8085	Not significant
D(BI_RATE) does not Granger Cause VOL_IHSG	0.24132	0.6244	Not significant
VOL_IHSG does not Granger Cause D(BI_RATE)	3,15081	0.0792	Significant at $\alpha=10\%$
Ln_CURS no Granger Cause VOL_IHSG	0.00120	0.9724	Not significant
VOL_IHSG does not Granger Cause ln_KURS	7,08813	0.0092	Significant at $\alpha=5\%$
D(ln_REGIONAL) does not Granger Cause VOL_IHSG	0.84552	0.3603	Not significant
VOL_IHSG does not Granger Cause D(ln_REGIONAL)	2.14788	0.1462	Not significant

Source : EViews output, processed (2026). Sample: 2018M01 2025M12. Lags: 1.

Causality found One direction from ln_ANGG against VOL_IHSG at the 10% level (Prob.=0.0729), without causality reverse (Prob.=0.8085), so that realization state spending

can positioned as a leading indicator for IHSG volatility . Interestingly , causality was also found One significant direction at the 5% level of VOL_IHSG towards ln_KURS (Prob.=0.0092), while D(BI_RATE) and D(ln_REGIONAL) do not show connection significant causality with VOL_IHSG.

Discussion

Influence Implementation Policy Pruning Budget to IHSG volatility. In general theoretical, relationship between pruning budget and volatility of the IHSG are ambiguous: the Keynesian approach states subtraction shopping government lower income national through negative multiplier effect so that trigger uncertainty term short (Keynes, 1936; Ardagna, 2004), whereas approach neoclassical emphasize that credible pruning strengthen discipline fiscal and reduce country risk in term length (Alesina et al., 2019). Research results This confirm second side theory the simultaneously : D(ln_ ANGG (-1)) has an effect positive significant against VOL_IHSG in term short (Prob.=0.0411), reflects shock adjustment investor expectations, however coefficient term length negative (significant at $\alpha=10\%$), indicating effect stabilization along awakening credibility fiscal . Findings This reinforced by dominance ln_ANGG as contributor external the largest in FEVD (5.50%) and causality One direction in the Granger Test. With Thus , H1 is accepted in a way partially: significant in term short at $\alpha=5\%$, and consistent direction in term length at $\alpha=10\%$.

The Influence of Interest Rates, Exchange Rates, and Regional Indexes . BI_RATE has an influence significant positive against VOL_IHSG only in term long (Prob.=0.0162), consistent with cost of capital mechanism (Tandelilin , 2017): increase interest rates push displacement investment from share to instrument income still . However because BI_RATE is entered with lag order 0 in the selected ARDL model , no there is dynamics term short on ECM, and its FEVD contribution small (0.13%), so H2 is accepted For term long However No confirmed strong in term short. On the other hand , ln_KURS No significant in term long (Prob.=0.5965) but influential very significant positive in term short (Prob.=0.0000 and 0.0015), so H3 is accepted in a way part . Index ASEAN regional stocks (ln_REGIONAL) no significant Good term short and term length (Prob.=0.3855), with smallest FEVD contribution second (0.44%), so H4 is rejected - different with part study the previous one who discovered regional market linkages, possibilities Because domination factor domestic in the period study This.

Response Dynamics and Direction of Causality. IRF results show IHSG volatility is mean-reverting with speed adjustment of 56.15% per month (ECT), confirming that the Indonesian capital market has mechanism relative correction fast to shocks , both internal and external external. The Granger Causality Test confirms direction causality One direction fromln_ANGG towards VOL_IHSG without causality back, so H5 is accepted in a way limited (significant at $\alpha=10\%$, not $\alpha=5\%$). The implication is that the policy budget government can positioned as *leading indicator* for movement capital market volatility, while the movement of the IHSG Alone No influence decision realization budget government ,

which is administrative nature scheduled and unscheduled reactive to fluctuations daily market.

Table 8. Summary of Test Results Hypothesis

Hypothesis	Key Results	Conclusion
H1 (ln_ANGG)	Term short significant positive (Prob.=0.0411); term long negative significant $\alpha=10\%$ (Prob.=0.0544); external FEVD contributor largest (5.50%)	Accepted part
H2 (BI_RATE)	Term long significant positive (Prob.=0.0162); without dynamics term short ; FEVD contribution is small (0.13%)	Accepted For term long
H3 (ln_CURS)	Term short significant positive strong (Prob.=0.0000/0.0015); term long No significant (Prob.=0.5965)	Accepted part
H4 (ln_REGIONAL)	Not significant term short and long (Prob.=0.3855); small FEVD contribution (0.44%)	Rejected
H5 (Causality)	Causality One direction ln_ANGG to VOL_IHSG, significant $\alpha=10\%$ (Prob.=0.0729); without causality back (Prob.=0.8085)	Accepted limited

Source : Processed from results ARDL, ECM, VAR, IRF, FEVD estimation , and Granger Causality Test (2026).

CONCLUSION AND SUGGESTIONS

Based on results analysis and discussion, can concluded four matter in accordance objective research. First, implementation policy pruning budget proxy government through realization proven state spending influential to IHSG volatility, with pattern different between time horizons: influential positive significant in term short, reflecting shock adjustment market expectations, however influential negative at 10% level in term length, indicating effect stabilization. Second, the relationship term short and long term long between policy pruning budget, interest rate, value exchange rate, ASEAN regional index, and IHSG volatility are heterogeneous : *Bounds Test* confirm cointegration at $\alpha=5\%$, benchmark interest rate significant only in term length, value swap significant only in term short, whereas ASEAN regional index does not significant on both horizons. Third, the response dynamic IHSG volatility is *mean-reverting* with speed adjustment of 56.15% per month, and realization state spending is contributor external is the most dominant (5.50%) compared to variables macroeconomics others, although more of 93% variation still explained internal market factors. Fourth, direction causality between policy budget and volatility of the IHSG are One direction (*unidirectional*) of realization state spending towards IHSG volatility, positioning policy budget as *leading indicator* for the capital market. Of the five hypothesis ,

one accepted For term length (H2), two accepted part (H1, H3), one accepted limited (H5), and one rejected (H4).

Based on findings said , the government recommended communicate policy pruning budget in a way credible and gradual For minimize shock term short towards the capital market at the same time speed up achievement effect stabilization term long, and strengthen coordination policy fiscal-monetary remember significance term BI_RATE length. Investors and capital market players are advised observe release realization state spending as *leading indicator* IHSG volatility and notice movement mark swap as signal turmoil term short, without ignore that majority volatility is endogenous to the market own. Research furthermore recommended extend period observation, testing *structural break* consequence COVID-19 pandemic , exploring proxies and volatility models alternatives (e.g. EGARCH or TGARCH) for explain difference findings regional index with study previously, and add variables foreign capital flows or market sentiment for get description determinant greater volatility of the IHSG comprehensive.

BIBLIOGRAPHY

- Adekoya, OB, Oliyide , JA, et al. (2020). *International Journal of Environmental Research and Public Health* , 17(18), 6729.
- Alesina, A., Favero, C., & Giavazzi , F. (2019). *Austerity: When it works and when it doesn't*. Princeton University Press.
- Ardagna, S. (2004). *Fiscal stabilizations: When do they work and why*. *European Economic Review* , 48(5), 1047-1074.
- Chatziantoniou, I., Duffy, D., & Filis, G. (2013). *Stock market response to monetary and fiscal policy shocks: Multi-country evidence*. *Quarterly Review of Economics and Finance*, 53(3), 252-269.
- Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics (5th ed.)* . McGraw-Hill Irwin.
- Granger, C. W. J. (1969). *Investigating causal relations by econometric models and cross-spectral methods*. *Econometrica* , 37(3), 424-438.
- Ministry of Finance of the Republic of Indonesia. (2024). *Macroeconomic Framework and Fundamentals Policy Fiscal (KEM-PPKF) 2025*. Ministry of Finance.
- Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*. Palgrave Macmillan .
- Mankiw, N.G. (2021). *Principles of Economics (9th ed.)* . Cengage Learning.
- Nurjanah, I., Azzahra, M., Mulia, SF, Delviro, E., & Panorama, M. (2023). *The Influence inflation and interest rates on Composite Stock Price Index (IHSG) for the 2018-2022 period* . Jupeko (Journal of Economic Education), 8(2), 11-24.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). *Bounds testing approaches to the analysis of level relationships*. *Journal of Applied Econometrics*, 16(3), 289-326.
- Saungweme, T., & Odhiambo, N.M. (2021). *Inflation and economic growth in Kenya: An empirical examination*. *Advances in Decision Sciences*, 25(3), 1-26.

-
- Silalahi, DES, & Ginting, RR (2020). *Policy strategy fiscal the Indonesian government in face impact COVID-19 pandemic*. *Jesya (Journal of Economics & Sharia Economics)*, 3(2), 156-167.
- Sims, C. A. (1980). *Macroeconomics and reality*. *Econometrica*, 48(1), 1-48.
- Tandelilin, E. (2017). *Capital Markets: Management Portfolio and Investment*. Kanisius.
- Tsalisati, L. (2024). *Volatility index price stocks and indicators macroeconomics in the middle optim*.