

**ANALISIS HUBUNGAN DINAMIS VARIABEL INFLASI, GDP, FDR,
ROA, CAR, DAN NPF PADA BANK UMUM SYARIAH
PERIODE 2017-2024**

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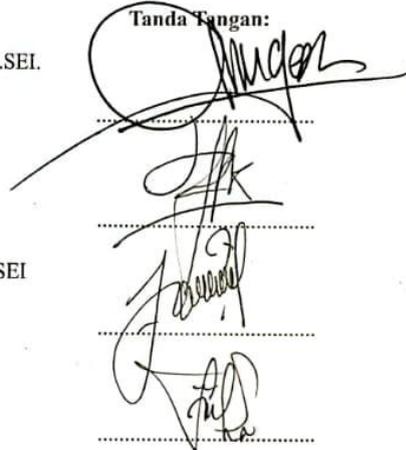
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ABSTRAK

Penelitian ini bertujuan untuk menganalisis hubungan dinamis antara variabel inflasi, *Gross Domestic Product* (GDP), *Financing to Deposit Ratio* (FDR), *Return on Assets* (ROA), *Capital Adequacy Ratio* (CAR), dan *Non-Performing Financing* (NPF) pada Bank Umum Syariah (BUS) di Indonesia selama periode 2017–2024. Penelitian ini menggunakan data time series dengan pendekatan *Vector Autoregression* (VAR) dan *Vector Error Correction Model* (VECM) guna menangkap hubungan jangka pendek dan jangka panjang antarvariabel.

Hasil penelitian menunjukkan adanya hubungan dinamis antara variabel makroekonomi dan rasio kesehatan bank terhadap NPF. Analisis *Impulse Response Function* (IRF) menunjukkan bahwa guncangan pada inflasi dan GDP menimbulkan respons yang berbeda terhadap pergerakan NPF, sementara variabel internal bank seperti ROA, CAR, dan FDR berperan dalam memperkuat maupun meredam fluktuasi pembiayaan bermasalah. Selanjutnya, hasil *Forecast Error Variance Decomposition* (FEVD) mengindikasikan bahwa variasi NPF lebih dominan dipengaruhi oleh faktor internal bank, khususnya rasio profitabilitas dan likuiditas, dibandingkan oleh variabel makroekonomi.

Temuan ini menegaskan bahwa stabilitas pembiayaan pada Bank Umum Syariah tidak hanya ditentukan oleh kondisi makroekonomi, tetapi juga sangat bergantung pada kinerja internal dan efektivitas manajemen risiko bank. Oleh karena itu, penguatan permodalan, peningkatan profitabilitas, serta pengelolaan likuiditas yang optimal menjadi faktor kunci dalam menjaga ketahanan perbankan syariah terhadap risiko pembiayaan bermasalah.

Kata kunci: *Non-Performing Financing*, Bank Umum Syariah, VAR/VECM, Inflasi, GDP, Rasio Kesehatan Bank.

ABSTRACT

This study aims to analyze the dynamic relationship among inflation, Gross Domestic Product (GDP), Financing to Deposit Ratio (FDR), Return on Assets (ROA), Capital Adequacy Ratio (CAR), and Non-Performing Financing (NPF) in Islamic Commercial Banks in Indonesia during the period 2017–2024. This research employs time-series data and applies the Vector Autoregression (VAR) and Vector Error Correction Model (VECM) approaches to capture both short-run and long-run dynamic relationships among the variables.

The results indicate the existence of dynamic interactions between macroeconomic variables and bank soundness indicators in influencing NPF. The Impulse Response Function (IRF) analysis reveals that shocks to inflation and GDP generate varying responses in NPF, while internal bank variables such as ROA, CAR, and FDR play a role in mitigating or amplifying fluctuations in non-performing financing. Furthermore, the Forecast Error Variance Decomposition (FEVD) results show that NPF variations are predominantly influenced by internal bank factors, particularly profitability and liquidity ratios, rather than macroeconomic variables.

These findings suggest that financing stability in Islamic Commercial Banks is not solely determined by macroeconomic conditions but is highly dependent on internal performance and effective risk management. Therefore, strengthening capital adequacy, improving profitability, and optimizing liquidity management are essential to enhance the resilience of Islamic banking against non-performing financing risks.

Keywords: *Non-Performing Financing, Islamic Commercial Banks, VAR/VECM, Inflation, GDP, Bank Soundness Ratios.*

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DAFTAR PUSTAKA

- Aisjah, S., Prabandari, S. P., & Hamid, W. (2022). Sustainability Factors of Sharia Banks in Indonesia. *Quality - Access to Success*, 23(190), 384–390. <https://doi.org/10.47750/QAS/23.190.40>
- Akhter, N. (2023a). Determinants of commercial bank's non-performing loans in Bangladesh: An empirical evidence. *Cogent Economics and Finance*, 11(1). <https://doi.org/10.1080/23322039.2023.2194128>
- Akhter, N. (2023b). Determinants of commercial bank's non-performing loans in Bangladesh: An empirical evidence. *Cogent Economics and Finance*, 11(1). <https://doi.org/10.1080/23322039.2023.2194128>
- Al Arif, M. N. R., & Rahmawati, R. (2021). Macroeconomic Variables and Profitability in the Indonesian Islamic Banking Industry. *El Barka: Journal of Islamic Economics and Business*, 4(1), 1–17. <https://doi.org/10.21154/elbarka.v4i1.2778>
- Alawiyah, N. K., Eprianti, N., & Yusup, A. (2025). *Pengaruh NPF dan FDR terhadap CAR pada Unit Usaha Syariah*. <https://doi.org/10.29313/jrps.v4i2.8306>
- Al-Homaidi, E. A., Tabash, M. I., & Ahmad, A. (2020). The profitability of islamic banks and voluntary disclosure: empirical insights from Yemen. *Cogent Economics and Finance*, 8(1). <https://doi.org/10.1080/23322039.2020.1778406>
- Al-Sharkas, A. A., & Al-Sharkas, T. A. (2022). THE IMPACT ON BANK PROFITABILITY: TESTING FOR CAPITAL ADEQUACY RATIO, COST-INCOME RATIO AND NON-PERFORMING LOANS IN EMERGING MARKETS. *Journal of Governance and Regulation*, 11(1 special issue), 231–243. <https://doi.org/10.22495/jgrv11i1siart4>
- Amanda, F., Eliza, A., & Ramdani, R. F. (2025a). Impact of Internal and External Factors on Non-Performing Financing in Indonesia's Islamic Commercial Banks. *Mutanaqishah: Journal of Islamic Banking*, 2025(1), 138–151. <https://doi.org/10.54045/Muta>
- Amanda, F., Eliza, A., & Ramdani, R. F. (2025b). Impact of Internal and External Factors on Non-Performing Financing in Indonesia's Islamic Commercial Banks. *Mutanaqishah: Journal of Islamic Banking*, 2025(1), 138–151. <https://doi.org/10.54045/Muta>

- Amanda, F., Eliza, A., & Ramdani, R. F. (2025c). Impact of Internal and External Factors on Non-Performing Financing in Indonesia's Islamic Commercial Banks. *Mutanaqishah: Journal of Islamic Banking*, 2025(1), 138–151. <https://doi.org/10.54045/Muta>
- Amin, S. M. M., & Jaya, T. J. (2024). The Effect of Bank Performance and Macroeconomics on the Profitability of Indonesian Sharia Commercial Banks. *Al-Muamalat: Jurnal Ekonomi Syariah*, 11(1), 95–114. <https://doi.org/10.15575/am.v11i1.34141>
- Ari Wiguna, W., & Wulandari, I. (2024). *PENGARUH CAPITAL ADEQUACY RATIO, LOAN TO DEPOSIT RATIO DAN BIAYA OPERASIONAL PENDAPATAN OPERASIONAL TERHADAP RETURN ON ASSET*. 8(2).
- Aufa, E. kurnia. (2019). *ANALISIS PENGARUH INFLASI, GROSS DOMESTIC PRODUCT (GDP), CAPITAL ADEQUACY RATIO (CAR), DAN FINANCING TO DEPOSIT RATIO (FDR) TERHADAP NON PERFORMING FINANCING (NPF) PADA BANK UMUM SYARIAH DI INDONESIA PERIODE 2013-2017*. 8(5), 55.
- Awaliyah, S. B., Fitri, L. E., & Roihan, M. (2025). FINANCING TO DEPOSIT RATIO (FDR), DANA PIHAK KETIGA (DPK) DAN CAPITAL ADEQUACY RATIO (CAR) TERHADAP RETURN ON ASSETS (ROA) BANK UMUM SYARIAH DI INDONESIA PERIODE 2021-2023 Universitas Jambi. In *Jurnal Ilmiah Multidisipliner (JIM)* (Vol. 9, Issue 7).
- Aziz, R. M., & Amanda, D. N. (2021). Analysis the level of Efficiency of Sharia Commercial Bank and Sharia Business Unit in Indonesia with Data Envelopment Analysis Method. *Jurnal Organisasi Dan Manajemen*, 17(1), 89–98. <https://doi.org/10.33830/jom.v17i1.834.2021>
- Azwani, A. (2021). Analisis Kointegrasi Dow Jones Islamic Market Index dan Jakarta Islamic Index dengan Pendekatan Vector Autoregressive. In *Prosiding Seminar Nasional SATIESP*.
- Azzah Nabiilah, I., Hartono, U., Asandimitra Haryono, N., Ekonomika dan Bisnis, F., & Negeri Surabaya, U. (2024). *ANALISIS KOINTEGRASI INDEKS SAHAM FILIPINA PSEI, INDEKS SAHAM MALAYSIA KLCI, INDEKS SAHAM AS DJIA DAN VARIABEL MAKROEKONOMI DENGAN IHSG*. 8(1).
- Białas, M., & Solek, A. (2010). Evolution of capital adequacy ratio. *Economics and Sociology*, 3(2), 48–57. <https://doi.org/10.14254/2071-789X.2010/3-2/5>
- Bod'a, M., & Zimková, E. (2021). Overcoming the loan-to-deposit ratio by a financial intermediation measure — A perspective instrument of financial

- stability policy. *Journal of Policy Modeling*, 43(5), 1051–1069.
<https://doi.org/10.1016/j.jpolmod.2021.03.012>
- Brixiová, Z., Kangoye, T., & Yogo, T. U. (2020). Access to finance among small and medium-sized enterprises and job creation in Africa. *Structural Change and Economic Dynamics*, 55, 177–189.
<https://doi.org/10.1016/j.strueco.2020.08.008>
- Chamberlin, G. (2011). Gross domestic product, real income and economic welfare. *Economic and Labour Market Review*, 5(5), 5–25.
<https://doi.org/10.1057/elmr.2011.51>
- Conti, A. M., Nobili, A., & Signoretti, F. M. (2023). Bank capital requirement shocks: A narrative perspective. *European Economic Review*, 151.
<https://doi.org/10.1016/j.eurocorev.2022.104254>
- Dinanti, N., Noviarita, H., & Devi, Y. (2025). PT. Media Akademik Publisher. *JMA*, 3(5), 3031–5220. <https://doi.org/10.62281>
- Doni Hari Prastyo1, S. A. (2021). Pengaruh Inflasi, GDP, CAR, dan FDR Terhadap Non Performing Financing (NPF) Bank Umum Syariah. *JURNAL EKONOMI, MANAJEMEN, BISNIS DAN SOSIAL (EMBISS)*, 1, 1–10.
- Ekspor Dan Impor Di Indonesia Khairani, T., Naomi Sitompul, P., Keuangan, M., & Unggulan Cipta Mandiri, P. (n.d.). Metode Vector Autoregressive (VAR) dalam Menganalisis Pengaruh Inflasi. *Pretty Naomi Sitompul INNOVATIVE: Journal Of Social Science Research*, 4, 6541–6555.
- Etika, C. (2025). STABILITAS KEUANGAN BANK SYARIAH DAN FAKTOR MAKROEKONOMI DI INDONESIA. *Jurnal Tabarru' : Islamic Banking and Finance*, 8(1).
- F Hoepner ab, A. G., S Wilson, J. O., Barth, J., Casu, B., Lehnert, A., & Scholtens, B. (n.d.). *Social, Environmental, Ethical and Trust (SEET) Issues in Banking: An Overview Acknowledgements: We are very grateful to.*
- Fakhrunnas, F., Nugrohowati, R. N. I., Haron, R., & Anto, M. H. (2023). THE ASYMMETRIC RELATIONSHIP BETWEEN MACROECONOMIC DETERMINANTS AND NONPERFORMING LOANS: EVIDENCE FROM THE BANKING INDUSTRY OF INDONESIA. *Buletin Ekonomi Moneter Dan Perbankan/Monetary and Banking Economics Bulletin*, 26(1), 145–174. <https://doi.org/10.59091/1410-8046.2049>
- Fathurrahman1, A., & Al-Islami, H. (n.d.). PENGARUH PASAR MODAL SYARIAH TERHADAP PERTUMBUHAN EKONOMI NASIONAL: PENDEKATAN METODE VECTOR ERROR CORRECTION MODEL (VECM). *Jurnal Tabarru' : Islamic Banking and Finance*, 6(1), 2023.

- Feria-Domínguez, J. M., Jiménez-Rodríguez, E., & Sholarin, O. (2015). Tackling the over-dispersion of operational risk: Implications on capital adequacy requirements. *North American Journal of Economics and Finance*, 31, 206–221. <https://doi.org/10.1016/j.najef.2014.11.004>
- Fitri Arwendi, D., Himmati, R., Ekonomi dan Bisnis Islam, F., & Sayyid Ali Rahmatullah, U. (2024). *Pengaruh Perbankan Syariah Terhadap Pertumbuhan Ekonomi Indonesia*. 5, 1734.
- Fitri, S. D., & Sriyana, J. (2023). Analisis Faktor-Faktor yang Memengaruhi Tingkat Non-Performing Financing (NPF) di Bank Umum Syariah Indonesia Periode 2015-2021. *Jurnal Informatika Ekonomi Bisnis*, 232–239. <https://doi.org/10.37034/infeb.v5i1.240>
- Fitria, C. W., & Setiawan, A. (2025). PROFITABILITY OF ISLAMIC COMMERCIAL BANKS IN INDONESIA: DETERMINANTS AND IMPLICATIONS. *Finansha: Journal of Sharia Financial Management*, 6(1), 1–18. <https://doi.org/10.15575/fjsfm.v6i1.40499>
- Ghosh, J. (2023). The social consequences of inflation in developing countries. *Economic and Labour Relations Review*, 34(2), 203–211. <https://doi.org/10.1017/elr.2023.11>
- Gündüz, G., Kuzucuoğlu, M., & Gündüz, Y. (2022). Entropic characterization of Gross Domestic Product per capita (GDP) values of countries. *Physica A: Statistical Mechanics and Its Applications*, 603. <https://doi.org/10.1016/j.physa.2022.127831>
- Hajerah, S., & Sahade, H. (2023). *MAKROEKONOMI*.
- Hallaq, W. B. (1994). From Fatwās to Furū: Growth and Change in Islamic Substantive Law. *Islamic Law and Society*, 1(1), 29–65. <https://doi.org/10.1163/156851994X00147>
- Hamidi, L., & Worthington, A. C. (2021). How social is Islamic banking? *Society and Business Review*, 16(1), 51–70. <https://doi.org/10.1108/SBR-03-2020-0036>
- Hansen, K. J. M., & Newman, J. R. (2023). Quart J Austrian Econ (2022) 25.4:XX-XX <https://qjae.scholasticahq.com/> doi: Creative Commons CC BY 4.0 License What Is Inflation? Clarifying and Justifying Rothbard's Definition. In *The QuarTerly Journal of ausTrian economics* (Vol. 25). <https://qjae.scholasticahq.com/>
- Hardana, A., Syahuri Zein, A., Johanna, A., & Avinash, B. (2023). Factors Influencing Non-Performing Financing (NPF) In Sharia Banking. *Journal Markcount Finance*, 1(2), 87–97. <https://doi.org/10.55849/jmf.v1i2.87>

- Hartanto, A., & Samputra, P. L. (2023a). Determinants of Non-Performing Financing for Islamic Commercial Banks in Indonesia with a Dynamic Panel Data Approach. *Information Sciences Letters*, 12(8), 2629–2642. <https://doi.org/10.18576/isl/120817>
- Hartanto, A., & Samputra, P. L. (2023b). Determinants of Non-Performing Financing for Islamic Commercial Banks in Indonesia with a Dynamic Panel Data Approach. *Information Sciences Letters*, 12(8), 2629–2642. <https://doi.org/10.18576/isl/120817>
- Hasiani, Y., Ambarwati, R., Maulana, F., & Ari, A. ' . (2025). *TEORI EKONOMI MAKRO*. www.freepik.com
- Hasibuan, A. A., Zulpahmi, Z., Wahyudin, N., & Nurlaila, A. (2022). The Effect Of Financing To Deposit Ratio (FDR), Non-Performing Financing (NPF), Capital Adequacy Ratio (CAR), Operating Expenses And Operating Income (BOPO) On ROA In Islamic Commercial Ban. *AL-FALAH : Journal of Islamic Economics*, 7(2), 289. <https://doi.org/10.29240/alfalah.v7i2.5395>
- Hidayat, D., & Masitoh, N. (2025). Navigating Financial Performance: The Influence of NPL and LDR on ROA with Inflation as a Moderating Factor. *EKOMA : Jurnal Ekonomi*, 4(2).
- Huda, M., Rofiqo, A., Abdul Razak, A. Bin, & Nabila, F. (2024). The Effect of Macroeconomic Variables on the Profitability of Islamic Commercial Banks in Indonesia. *Islamic Economics Journal*, 10(2), 135–149. <https://doi.org/10.21111/iej.v10i2.11759>
- Humairah, N., Andriansyah, Y., & Badjie, F. (2023). Determinants of Profitability in Indonesian Islamic Banks: Insights on Financial Performance. *Unisia*, 41(2), 413–440. <https://doi.org/10.20885/unisia.vol41.iss2.art9>
- İncekaraa, A., & Harun Çetinkaya. (2019). *Credit Risk Management: A Panel Data Analysis on The Islamic Banks in Turkey*.
- Inul Fitri1; Niar Astaginy2; Ismanto3. (2025). *PENGARUH CAPITAL ADEQUACY RATIO (CAR) DAN PROFITABILITAS TERHADAP HARGA SAHAM PADA PERBANKAN SYARIAH INDONESIA YANG TERDAFTAR DI BURSA EFEK INDONESIA*. <https://finansial.bisnis.com>
- Irfan, M. I., & Sulistijanti, W. (2024). *Peramalan Produksi Padi di Kabupaten Kendal Tahun 2024 Menggunakan Metode VAR (Vektor Autoregressive)*. <http://Jiip.stkipyapisdompu.ac.id>
- Istaiteyeh, R., & Najem, F. (2023). GDP and Inflation: New Story from a Developing World Case of Jordan. *Advances in Management and Applied Economics*, 25–44. <https://doi.org/10.47260/amae/1362>

- Istan, M., & Fahlevi, M. (2020). The Effect of External and Internal Factors on Financial Performance of Islamic Banking. *Jurnal Ekonomi & Studi Pembangunan*, 21(1). <https://doi.org/10.18196/jesp.21.1.5036>
- Jewell, J. J., University, L., & Mankin, J. A. (2011). WHAT IS YOUR ROA? AN INVESTIGATION OF THE MANY FORMULAS FOR CALCULATING RETURN ON ASSETS. In *Academy of Educational Leadership Journal* (Vol. 15). Special Issue. <http://ssrn.com/abstract=2155943>
- Joshua Aizenman Nancy Marion. (2009). *USING INFLATION TO ERODE THE U.S. PUBLIC DEBT*.
- Kamaruzzaman, Z. A. (2019). Inflation: A Malaysia story. *International Journal of Engineering and Advanced Technology*, 8(6 Special Issue 3), 132–135. <https://doi.org/10.35940/ijeat.F1022.0986S319>
- Kartika, A., & Putri, C. A. (2025). Analisis Pengaruh Capital Adequacy Ratio, Non-Performing Financing, dan Financing to Deposit Ratio terhadap Likuiditas pada Bank Umum Syariah di Indonesia (Vol. 2, Issue 1). <https://ejournal.pkmpi.org/index.php/jibei72>
- Kayakus, M., Tutcu, B., Terzioglu, M., Talaş, H., & Ünal Uyar, G. F. (2023). ROA and ROE Forecasting in Iron and Steel Industry Using Machine Learning Techniques for Sustainable Profitability. *Sustainability (Switzerland)*, 15(9), 1–14. <https://doi.org/10.3390/su15097389>
- Kezia Angel Pinaria, Harya Kuncara Wiralaga, & Ari Saptono. (2024). EFEKTIVITAS MEKANISME TRANSMISI KEBIJAKAN MONETER JALUR HARGA ASET DI INDONESIA TAHUN 2016 - 2022. *Jurnal Ilmiah Manajemen Dan Akuntansi*, 1(4), 157–168. <https://doi.org/10.69714/0cmp1k58>
- Khairani, P. N. S. (2024). Metode Vector Autoregressive (VAR) dalam Menganalisis Pengaruh Inflasi. *INNOVATIVE: Journal Of Social Science Research*, 4, 6541–6555.
- Kumar, D., Hossain, Z., & Islam, S. (2020). Non-Performing Loans in Banking Sector of Bangladesh: An Evaluation. *International Journal of Applied Economics, Finance and Accounting*, 6(1), 22–29. <https://doi.org/10.33094/8.2017.2020.61.22.29>
- Kurniasih, E. P. (2019). The long-run and short-run impacts of investment, export, money supply, and inflation on economic growth in Indonesia. *Journal of Economics, Business, & Accountancy Ventura*, 22(1), 21–28. <https://doi.org/10.14414/jebav.v22i1.1589>

- Latviani Z, D., & Setiawan, I. (2025a). The Effect of Inflation, Exchange Rates and Third-Party Funds on Financing to Deposit Ratio (FDR) at Sharia Commercial Banks in 2019-2023. *Indonesian Journal of Economics and Management*, 5(2), 216–240. <https://doi.org/10.35313/ijem.v5i2.6577>
- Latviani Z, D., & Setiawan, I. (2025b). The Effect of Inflation, Exchange Rates and Third-Party Funds on Financing to Deposit Ratio (FDR) at Sharia Commercial Banks in 2019-2023. *Indonesian Journal of Economics and Management*, 5(2), 216–240. <https://doi.org/10.35313/ijem.v5i2.6577>
- Lay, S. H. (2020). Bank credit and economic growth: Short-run evidence from a dynamic threshold panel model. *Economics Letters*, 192. <https://doi.org/10.1016/j.econlet.2020.109231>
- Lestari, S., & Khoiriyah, R. (2024). Analisis Pengaruh Faktor Eksternal: Tingkat Inflasi, Suku Bunga BI, dan Pertumbuhan Ekonomi (GDP) terhadap Risiko Kredit Pada Bank Syariah (NPF). In *Journal of Economics and Business Review* (Vol. 3, Issue 2).
- Lumbanraja, P. L., & Lumbanraja, P. C. (2024). FAKTOR-FAKTOR PRODUKTIVITAS KELAPA SAWIT RAKYAT DI PROVINSI SUMATERA UTARA MELALUI PENDEKATAN METODE VECTOR ERROR CORRECTION MODEL (VECM) Factors of Community Palm Oil Productivity in North Sumatra Province Through The Vector Error Correction Model (VECM) Approach. In *JOURNAL OF ANALYTICAL RESEARCH* (Vol. 3, Issue 2).
- Lusiana, D., & Wakhid Musthofa, M. (2025). *B a a b u A l-I l m i Ekonomi dan Perbankan Syariah Analisis Pengaruh FDR, NPF, Inflasi dan BI Rate terhadap Profitabilitas Perbankan Syariah di Indonesia*. 10(01), 90–104. <https://ojk.go.id>,
- M. Anwar, S., Junaidi, J., Salju, S., Wicaksono, R., & Mispiyanti, M. (2020a). Islamic bank contribution to Indonesian economic growth. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(3), 519–532. <https://doi.org/10.1108/IMEFM-02-2018-0071>
- M. Anwar, S., Junaidi, J., Salju, S., Wicaksono, R., & Mispiyanti, M. (2020b). Islamic bank contribution to Indonesian economic growth. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(3), 519–532. <https://doi.org/10.1108/IMEFM-02-2018-0071>
- Mabwe, K., & Jaffar, K. (2022). UK Government controls and loan-to-deposit ratio. *Journal of Financial Regulation and Compliance*, 30(3), 353–370. <https://doi.org/10.1108/JFRC-06-2021-0048>

- Maghfiroh, R. D., Asandimitra, N., & Hartono, U. (2023). Moderation Analysis of Good Corporate Governance on the Effect of Financial Ratio and Market Ratio on Financial Distress. *International Journal of Professional Business Review*, 8(7), e02933. <https://doi.org/10.26668/businessreview/2023.v8i7.2933>
- Marlina, N., & Suriadi, I. (2023). *INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS Autoregressive Vector (VAR) Method in Analyzing Inflation Persistence in Indonesia*. <https://doi.org/10.47191/ijmra/v6-i10-17>
- Martias, L. D. (2021). STATISTIKA DESKRIPTIF SEBAGAI KUMPULAN INFORMASI. *Fihris: Jurnal Ilmu Perpustakaan Dan Informasi*, 16(1), 40. <https://doi.org/10.14421/fhrs.2021.161.40-59>
- Mawardi, I., Al Mustofa, M. U., Widiastuti, T., & Wahid, W. W. (2023). Early warning systems in Indonesian Islamic banks: A comparison of Islamic commercial and rural banks. *Cogent Economics and Finance*, 11(1). <https://doi.org/10.1080/23322039.2023.2172803>
- Miao, W., Ma, Y., & Xu, H. (2025). The diminishing marginal effect of the capital adequacy ratio on the control of bank risk-taking. *North American Journal of Economics and Finance*, 80(April). <https://doi.org/10.1016/j.najef.2025.102495>
- Mongid, A., Tinggi, S., Ekonomi, I., & Surabaya, P. (2015). Liquidity risk management in the Islamic rural banking: Evidence from Indonesia. In *Banks and Bank Systems* (Vol. 10).
- Mu'arrif, Z. I., & Kerinci, I. (2024). *Hubungan Jangka Pendek dan Jangka Panjang antara Pembiayaan Perbankan Syariah dan GDP di Indonesia dengan Menggunakan Metode Vector Error Correction Model*. 5, 4398.
- Mubarok, F., Wibowo, M., & Latif, S. D. H. (2024). Safeguarding Stability and Enhancing Profitability: The Case of Islamic Banking in Indonesia. *International Journal of Islamic Economics and Finance (IJIEF)*, 7(1), 455–472. <https://doi.org/10.18196/ijief.v7i1.20537>
- Murtiningsih, S., & Tohirin, A. (2023). THE INFLUENCE OF SOME BANK FINANCIAL RATIOS CHARACTERISTICS ON PROFITABILITY IN SHARIA BANK. *Business and Accounting Research (IJEBA) Peer Reviewed-International Journal*, 7. www.ojk.go.id
- Musarat, M. A., Alaloul, W. S., & Liew, M. S. (2021). Impact of inflation rate on construction projects budget: A review. *Ain Shams Engineering Journal*, 12(1), 407–414. <https://doi.org/10.1016/j.asej.2020.04.009>

- Mustofa, H. Z., & Faizin, Moh. (2025). Effect of Macroeconomic Factors on Economic Growth in Indonesia. *Journal of Developing Economies*, 10(1), 48–72. <https://doi.org/10.20473/jde.v10i1.60620>
- Nadiyah Alfia Syafitri. (2019). *ANALISIS PENGARUH KINERJA KEUANGAN DAN MAKRO EKONOMI TERHADAP STABILITAS PERBANKAN SYARIAH DI INDONESIA*.
- Nasution, S., Silalahi, P. R., & Khairunnisa, A. (2022). Analisis Pengaruh GDP, Inflasi, CAR, Dan NPF Terhadap Profitabilitas Perbankan Syariah Di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 8(3), 3283. <https://doi.org/10.29040/jiei.v8i3.6352>
- Niswatin, & Santoso, I. R. (2025). “Factors affecting non-performing finance in Islamic banking in Indonesia’s agricultural sector. *Banks and Bank Systems*, 20(1), 323–333. [https://doi.org/10.21511/bbs.20\(1\).2025.26](https://doi.org/10.21511/bbs.20(1).2025.26)
- Nugroho, L., Nugraha, E., & Badawi, A. (2020). The Determinant of Islamic Performance Ratio: Do Financing Deposit Ratio, Financing Quality, and Return on Asset Ratio Matters? *Global Review of Islamic Economics and Business*, 8(2), 113–122. <https://doi.org/10.14421/grieb.2020.082-04>
- Nugroho, M., Arif, D., & Halik, A. (2021). The effect of loan-loss provision, non-performing loans and third-party fund on capital adequacy ratio. *Accounting*, 7(4), 943–950. <https://doi.org/10.5267/j.ac.2021.1.013>
- Nur, A., Utama, B., & Mustika, C. (2022). Analisis hubungan pertumbuhan ekonomi dan ekspor Indonesia ke China dengan pendekatan kausalitas granger. In *Jurnal Paradigma Ekonomika* (Vol. 17, Issue 3).
- Nur Faizah, S. (2022). INTEGRASI PASAR BIJI KAKAO INDONESIA DENGAN PASAR DUNIA Integration of the Indonesian with World Cocoa Beans Markets. *Jurnal Agro Ekonomi*, 41(1), 39–49. <https://doi.org/10.21082/jae.v41n1.2023.39-49>
- Nurjanah, N., Purnama, N. S., Studi, P., Syariah, K., Teknologi, I., Bisnis, D., & Dahlan, A. (2023). *Perkembangan Lembaga Keuangan Syariah dan Kondisi Makro Ekonomi di Indonesia*. <https://doi.org/10.29040/jiei.v9i1.7985>
- Nyoto Ahmad Syaifudin, A. F. K. S. A. T. (2025). *Pengaruh Inflasi, Financing to Deposit Ratio (FDR), Capital Adequacy Ratio (CAR), dan Biaya Operasional terhadap Pendapatan Operasional (BOPO) terhadap Non-Performing Financing (NPF) Perbankan Syariah di Indonesia 2021-2024*.
- Orugun, F. I., Osondu, C., Baba Yaro, I., John, E. I., & Olorutumba, O. (2024). *Linkages between Inflation, Exchange Rates, Finance and Non-Performing*

Loans: Evidence from Low-and Middle-Income Countries.

<https://doi.org/10.528>

- Palupi, R., & Efriyanti, N. (2025). Pengaruh Tingkat Inflasi Dan Nilai Tukar Terhadap Resiko Pembiayaan Bermasalah Di Perbankan Syariah. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(2), 1212–1219. <https://doi.org/10.31004/riggs.v4i2.650>
- Ponziani, R. M. (2023a). Inflation forecasting using autoregressive distributed lag (ARDL) models. *Jurnal Ekonomi & Studi Pembangunan*, 24(2), 316–330. <https://doi.org/10.18196/jesp.v24i2.17620>
- Ponziani, R. M. (2023b). Inflation forecasting using autoregressive distributed lag (ARDL) models. *Jurnal Ekonomi & Studi Pembangunan*, 24(2), 316–330. <https://doi.org/10.18196/jesp.v24i2.17620>
- Rabiana, O., Iqbal, R., Sari, Y. P., & Juliansyah, R. (2024). Hubungan Ekspor, Kurs Dan Produk Domestik Bruto : Vector Error Correction Model (VECM) Approach. *INNOVATIVE: Journal Of Social Science Research*, 4, 12135–12143.
- Rahmanisa Aulia Safitri, Mukhtar, S., & Zahra, S. F. (2024). MSME Financing in Indonesia Islamic Banks: Impact of Third-Party Funds, ROA, and FDR. *JEKSYAH: Islamic Economics Journal*, 4(01), 39–49. <https://doi.org/10.54045/jeksyah.v4i01.1507>
- Rahmatullah, D. (2024a). *The Role of Bank Profitability and Liquidity in Indonesia's Economic Growth: An Empirical Study on ROA, LDR, and CAR.*
- Rahmatullah, D. (2024b). *The Role of Bank Profitability and Liquidity in Indonesia's Economic Growth: An Empirical Study on ROA, LDR, and CAR.*
- Rahmawati, Z., & Sari Pratiwi, R. (2025). The Role of CAR as a Mediating Variable in the Impact between NPF and FDR on ROA of Islamic Banks. *Jamanika (Jurnal Manajemen Bisnis Dan Kewirausahaan)*, 5(2), 218–227. <https://doi.org/10.22219/jamanika.v5i2.41556>
- Rahmayanti, D., Hilian Batin, M., Ariyani, D., Ifada, K., & Sulthan Sharif Ali Brunei Darussalam, I. (2023). Determinants of Islamic banking financing in Indonesia: An empirical analysis of internal and macroeconomic factors. *Management, and Business (JIEMB)*, 5(1), 1–24. <https://doi.org/10.21580/jiemb.2023.5.1.15220>
- Ramanesty, E. D., & Prasetyo, A. (2020). The Impact of Financial Structure, Inflation, and Economical Growth on Non-performing Financing at Islamic Rural Bank in West Java 2011-2015. In *International Journal of Innovation, Creativity and Change*. www.ijicc.net (Vol. 11, Issue 9).

- Resmawan, H., Qolbi, S. H., Keuangan, M. T., Syariah, P., & Bandung, P. N. (2024). *Berajah Journal PENGARUH NPF TERHADAP LABA (ROA) DENGAN VARIABEL MODERATING BANK JABAR BANTEN SYARIAH TAHUN 2010-2023 THE INFLUENCE OF NPF ON PROFITS (ROA) WITH MODERATING VARIABLES BANK JABAR BANTEN SYARIAH 2010-2023*. <https://doi.org/10.47353/bj.v4i10.506>
- Risalatul Mu'awanah, & Maretha Ika Prajawati. (2025). Analisis Pengaruh Makroekonomi Terhadap Capital Adequency Ratio (CAR) pada Bank Konvensional yang Terdaftar di BEI pada Periode 2020-2024. *Jurnal Manajemen Bisnis Digital Terkini*, 2(4), 289–302. <https://doi.org/10.61132/jumbidter.v2i4.920>
- Ritonga, K., Imsar, & Bi Rahmani, N. A. (2025). The Influence of Macroeconomic Factors on Murabahah Financing Performance at Bank Syariah Indonesia. *Journal of Finance and Islamic Banking*, 8(1), 95–110. <https://doi.org/10.22515/jfib.v8i1.12154>
- Robinson Sihombing, P. (2025). *MODUL AJAR STATISTIKA TIME SERIES SELAYANG PANDANG ANALISIS DATA DERET WAKTU*.
- Rohmah, N. A., & Darmawan, D. (2024). Pengaruh Inflasi dan GDP terhadap Tingkat Kesehatan Bank Syariah dengan Size sebagai Pembeda. *El-Mujtama: Jurnal Pengabdian Masyarakat*, 4(2). <https://doi.org/10.47467/elmujtama.v4i2.688>
- Roihan, M. (2023). THE INFLUENCE OF CAPITAL ADEQUACY, NON-PERFORMING FINANCING, LIQUIDITY, AND OPERATIONAL EFFICIENCY ON PROFITABILITY OF ISLAMIC BANKS. *Business and Accounting Research (IJEBAR) Peer Reviewed-International Journal*, 7. <https://jurnal.stie-aas.ac.id/index.php/IJEBAR>
- Sauzan Hasanah, D., Andi Rivai, A., & Amri, A. (2025). Dampak Pertumbuhan Bank Umum Syariah terhadap Strategi Unit Usaha Syariah (UUS) di Indonesia: Tinjauan Perspektif Kesadaran Masyarakat dan Kebijakan Otoritas Jasa Keuangan (OJK). *Jurnal Ekonomi Syariah*, 03(01). <https://doi.org/10.52029/gose.v3i1.312>
- Shalsabillah, R., Selvina, M., & Setyanto, A. R. (2026). *B a a b u A l-I l m i Ekonomi dan Perbankan Syariah Pengaruh Investasi Asing Langsung, Indeks Kualitas Lingkungan, dan Inflasi terhadap Pertumbuhan Ekonomi Negara-Negara G20 Asia Periode 2014-2024 dalam Perspektif Ekonomi Islam*. <https://ejournal.uinfabengkulu.ac.id/index.php/alilmi/>
- Sharma, S., Bansal, M., & Saxena, A. K. (2022). Forecasting of GDP (Gross Domestic Product) per Capita Using (ARIMA) Data-Driven Intelligent Time

Series Predicting Approach. *2022 International Conference on Sustainable Islamic Business and Finance, SIBF 2022*, 85–90.
<https://doi.org/10.1109/SIBF56821.2022.9939928>

- Sudiyatno, B., Puspitasari, E., Susilowati, Y., Sudarsi, S., & Udin, U. (2019). Determinants of capital adequacy ratio: An empirical study on the conventional banks in Indonesia. *International Journal of Innovation, Creativity and Change*, 9(7), 115–127.
- Sugiharti, R. R., Lukis Panjawa, J., & Hasti, A. D. (2021). *Dinamika Variabel Moneter terhadap Ekspor di Indonesia: Pendekatan VECM*.
<https://journal.unimma.ac.id>
- Suhrab, M., Soomro, J. A., Ullah, S., & Chavara, J. (2023). The effect of gross domestic product, urbanization, trade openness, financial development, and renewable energy on CO2 emission. *Environmental Science and Pollution Research*, 30(9), 22985–22991. <https://doi.org/10.1007/s11356-022-23761-8>
- Supriyatni, R., & Nurjamil. (2021). The Urgency of Handling Non-Performing Financing in Sharia Banks in the Development of Indonesian Sharia Economics. *Padjadjaran Jurnal Ilmu Hukum*, 8(1), 26–46.
<https://doi.org/10.22304/pjih.v8n1.a2>
- Susanti, W., Muda, I., & Soemitra, A. (2023). *Determinasi Pembiayaan Modal Kerja Usaha Mikro Kecil dan Menengah pada Perbankan Syariah di Indonesia*.
- Susanti, W., Muda, I., & Soemitra, A. (2025). *Determinasi Pembiayaan Modal Kerja Usaha Mikro Kecil dan Menengah pada Perbankan Syariah di Indonesia*.
- Syed, A. A., & Tripathi, R. (2019). Non-performing loans in BRICS nations: Determinants and macroeconomic impact. *Indian Journal of Finance*, 13(2), 22–35. <https://doi.org/10.17010/ijf/2019/v13i2/141684>
- Tabassum, & Pande, S. (2021). Sensitivity of non-performing assets to GDP and inflation rate volatility. *Indian Journal of Finance*, 15(4), 41–58.
<https://doi.org/10.17010/ijf/2021/v15i4/158672>
- Tangngisalu, J., Hasanuddin, R., Hala, Y., Nurlina, N., & Syahrul, S. (2020). Effect of CAR and NPL on ROA: Empirical study in Indonesia Banks. *Journal of Asian Finance, Economics and Business*, 7(6), 9–18.
<https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.009>
- Tran, T. N. (2024a). Exploring Influencing Factors on Capital Adequacy in Commercial Banks. *Emerging Science Journal*, 8(2), 527–538.
<https://doi.org/10.28991/ESJ-2024-08-02-010>

- Tran, T. N. (2024b). Exploring Influencing Factors on Capital Adequacy in Commercial Banks. *Emerging Science Journal*, 8(2), 527–538.
<https://doi.org/10.28991/ESJ-2024-08-02-010>
- Utama, A. S. (2020). Arah Kebijakan Pengawasan terhadap Perbankan Syariah dalam Sistem Perbankan Nasional di Indonesia. *Volksgeist: Jurnal Ilmu Hukum Dan Konstitusi*, 3(1 41), 52.
<https://doi.org/10.24090/volksgeist.v3i1.3498>
- Wahyu Setyaningsih, E., Wahyu Setyaningsih UIN ABDURRAHMAN WAHID PEKALONGAN Irfa Febriyani UIN KH ABDURRAHMAN WAHID PEKALONGAN Sabina Sukma Maulidya UIN KH ABDURRAHMAN WAHID PEKALONGAN Marlinda Effendi UIN KH ABDURRAHMAN WAHID PEKALONGAN Marfita Hikmatul Aini, E. K., Taufiq Abadi UIN ABDURRAHMAN WAHID PEKALONGAN Alamat, M. K., Pahlawan Km, J., & Kajen Kab Pekalongan, R. (2023). Implementasi Faktor-faktor Berpengaruh Terkait Efisiensi dan Kredibilitas Bank umum Syariah di Indonesia. *Jurnal Ilmiah Ekonomi Dan Manajemen*, 1(4), 265–275. <https://doi.org/10.61722/jiem.v1i4.367>
- Wanda Hamidah, Isnaini Harahap, & Khairina Tambunan. (2024). Hubungan Kausalitas Antara Pertumbuhan Ekonomi, Indeks Pembangunan Manusia, Kemiskinan dan Pengangguran di Kabupaten Rokan Hulu. *Trending: Jurnal Manajemen Dan Ekonomi*, 2(2), 272–295.
<https://doi.org/10.30640/trending.v2i2.2333>
- Widyaningrum, T., & Lubis, F. R. A. (2024). Pengaruh Variabel Makro Ekonomi Terhadap Nilai Tukar Rupiah di Indonesia. *Jurnal Genesis Indonesia*, 3(01), 49–60. <https://doi.org/10.56741/jgi.v3i01.494>
- Wulandari, C., & Efendi, D. (2022). *PENGARUH PROFITABILITAS TERHADAP NILAI PERUSAHAAN DENGAN CORPORATE SOCIAL RESPONSIBILITY SEBAGAI VARIABEL MODERASI*.
- Yilmaz Küçük, Ş. (2022). DETERMINANTS OF NON-PERFORMING CONSUMER LOANS FOR TURKEY: ARDL BOUNDS TESTING APPROACH. *Business, Management and Economics Engineering*, 20(2), 312–328. <https://doi.org/10.3846/bmee.2022.16936>
- Zaki, M., & Saiman. (2021). Kajian Tentang Perumusan Hipotesis Statistik Dalam. *JiIP - Jurnal Ilmiah Ilmu Pendidikan*, 4(2), 115–118.