

The Role of Economic Growth and Economic Freedom in Moderating the Influence of Bank Health Performance on Profitability

Siti Nabila Zida Sabrina¹, Titis Miranti²

^{1,2}Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia
Email: sabrinazida06@gmail.com¹, titis@uin-malang.ac.id²

Abstract

This study aims to analyze the effect of bank soundness on the profitability of Islamic Banks in Indonesia, with economic growth and economic freedom as moderating variables. Bank soundness is measured using the RGEC approach. This study adopts a quantitative approach, employing panel data regression analysis and Moderated Regression Analysis (MRA). The data used consist of annual secondary data from 2011 to 2024, including financial ratios from the annual reports of Islamic commercial banks in Indonesia, as well as data on Indonesia's economic growth and economic freedom. The results show that bank soundness has a significant effect on profitability, except for GCG. Economic growth and economic freedom moderate the relationship between all independent variables and the dependent variable, except for GCG. These findings emphasize the importance of strengthening internal bank factors and macroeconomic support to enhance the profitability of Islamic banking in Indonesia.

Keywords: Risk Profile, Corporate Governance, Profitability, Capital, Economic Growth, Economic Freedom

Introduction

The growth of Sharia banking assets has increased annually over the past decade.¹ This indicates that the public also utilizes Sharia financial services.² However, even as the assets of Sharia banking continue to grow, this increase is not accompanied by a rise in profitability, the main indicator of sharia banking's development.³ Increased profitability not only demonstrates financial performance, but also strengthens public trust in the sharia banking system.⁴

The profitability of Islamic Commercial Banks increased from 1.8% (2011) to 2.1% (2012), then briefly declined to 2.0% (2013), fluctuated, and improved again since 2018, exceeding 2% in 2022-2023. The interrelated influences of internal and

¹ Otoritas Jasa Keuangan, "Roadmap Pengembangan Perbankan Syariah Indonesia," 2020, <https://www.ojk.go.id/id/kanal/syariah/berita-dan-kegiatan/publikasi/Pages/Roadmap-Pengembangan-Perbankan-Syariah-Indonesia-2020-2025.aspx>.

² Ashraf Mohamed Dawaba and Abdalrahman Migdad, "Islamic Banks between the Jurisprudence of Leading Theorists and Application," *Islamic Economics Journal*, Vol. 08, No. 01 (2022), 34–56; Zulfa Ahmad Kurniawan, "Comparison of Islamic Commercial Banks and Islamic Business Units : Which Is More Efficient?," *Islamic Economics Journal*, Vol. 11, No. 01 (2025), 61–76.

³ Rafi Faisal Firdaus and Ersi Sisdianto, "Analisis Ratio Profitabilitas Sebagai Penilaian Kinerja Keuangan Bank Syariah Indonesia : Studi Kasus Laporan Tahun 2022-2023 Profitability Ratio Analysis as an Assessment of the Financial Performance of Indonesian Sharia Banks: Case Study Report For 202," *JIC: Jurnal Intelekt Insan Cendekia*, Vol. 1, No. 10 (2024), 7384–91; Filda Felisa Putri, Dahruji Dahruji, and Taufiqur Rahman, "Prediksi Rasio Profitabilitas Bank Umum Syariah Yang Terdaftar ISSI: Pendekatan Tren Kuadratik," *Ekonomi, Keuangan, Investasi dan Syariah (EKUITAS)*, Vol. 6, No. 2 (2024), 58–66; Idah Zuhroh, "Profitabilitas Bank Syariah di Indonesia Bagaimana Pengaruh Permodalan, Inflasi dan Birate?," *Jurnal Reviu Akuntansi dan Keuangan*, Vol. 12, No. 2 (2022), 398–415.

⁴ Hairul Anam, Hendika SL, and Bani Anhar, "Tingkat Kesehatan Bank dengan Metode RGEC," *Jurnal GeoEkonomi*, Vol. 13, No. 1 (2022), 116–27.

external factors cause profitability fluctuations.⁵ The internal banking factor that is directly related to profitability is the bank's performance, which can be observed through its level of soundness.⁶ Meanwhile, the external factors related to banking are the quality of the business environment, regulations, and the current state of economic growth.⁷



Figure 1. Profitability of Islamic Commercial Banks

Source: Data processed by the researcher, 2025

Bank health assessments are conducted using the RGEC method with a risk-based approach, which covers four main components: risk profile, Good Corporate Governance (GCG), earnings, and capital.⁸ *Risk Profile* describes the level of risk faced by the bank and how its management strategies are implemented.⁹ Good Corporate Governance (GCG) assesses the extent to which the bank implements the principles of good governance.¹⁰ Earnings reflect a bank's ability to generate

⁵ Andana Prawitra Rachmadani, Riko Setya Wijaya, and Arief Bachtiar, "Faktor-Faktor Internal dan Eksternal yang Mempengaruhi Profitabilitas Bank Syariah di Indonesia Periode 2009-2019," *Syntax Literate: Jurnal Ilmiah Indonesia*, Vol. 6, No. 2, (2021), 1053-79; Silvia Hendrayanti, Wachidah Fauziyanti, and Eni Puji Estuti, "Dampak Faktor Internal dan Eksternal Terhadap Profitabilitas Perbankan (Studi pada Bank Konvensional di Indonesia Periode Januari 2012 - Januari 2019)," *Jurnal STIE Semarang*, Vol. 11, No. 3, (2019), 5-24; Ratri Zho hratun Aini and Rusdianto, "Analysis of Factors Affecting Profitability of Islamic Banks in Yogyakarta," *Islamic Economics Journal* Vol.10, No. 02 (2024), 103-15.

⁶ Joko Subangkit, et. al., "Analisis Pengaruh Tingkat Kesehatan Bank terhadap Profitabilitas (Studi Kasus pada Bank NTB Syariah Tahun 2020-2022)," *JPEK (Jurnal Pendidikan Ekonomi dan Kewirausahaan)*, Vol. 8, No. 2 (2024), 840-49.

⁷ Rukiah Lubis, Wanda Khairun Nasirin, and Ananda Anugrah Nasution, "The Relationship between Foreign Direct Investment, Islamic Financial Performance and Economic Freedom as Moderating Variable," *International Journal of Islamic Business and Economics (IJIBEC)*, Vol. 7, No. 1 (2023), 49-63; Setiawan Setiawan, Leni Nur Pratiwi, and Rani Putri Kusuma Dewi, "Efisiensi Operasional, Makroekonomi, dan Profitabilitas pada Perbankan Syariah di Indonesia," *Jurnal Ilmiah Akuntansi dan Keuangan*, Vol. 4, No. 1, (2021), 40-45; Miftahul Huda, Azidni Ro fiqo, Abdurri zqi Bin Abdul Razak, and Fikriyyatun Nabila. "The Effect of Macroeconomic Variables on the Profitability of Islamic Commercial Banks in Indonesia." *Islamic Economics Journal* Vol.103, No. 1 (2024), 135-49.

⁸ Wahyu Izza Safira and Esy N, "Analisis Tingkat Kesehatan Bank Syariah Serta Dampaknya terhadap Nilai Perusahaan Analysing the Health of Islamic Banks and Its Impact on Firm Value," *Jurnal Perbankan Syariah*, Vol. 10, No. 1, (2024), 85; Indah Harum Rezeki and Heni Noviarita, "Analisis Rasio Kinerja Keuangan Bank Muamalat Indonesia pada Masa Pandemi," *Islamic Economics Journal*, Vol. 07, No. 01 (2021), 64-75.

⁹ Sania Nisa Aryani and Iwan Setiawan, "Analisis Pengaruh Risk Profile Terhadap Profitabilitas Unit Usaha Syariah Pada Tahun 2015-2023," *Journal of Applied Islamic Economics and Finance*, Vol. 4, No. 3 (2024), 463-74; Irma Nur Rohmah and M Nasir, "Analisis Pengaruh Tingkat Kesehatan Bank terhadap Profitabilitas dengan Menggunakan Metode RGEC pada Bank Pemerintah dan Bank Swasta yang Terdaftar di BEI Periode 2017-2021," *Innovative*, Vol. 3, No. 5, (2023), 5238-53.

¹⁰ Husna Dara Sarra, Mikrad Mikrad, and Sunanto, "Analisis Pengaruh Tingkat Kesehatan Bank Menggunakan Metode RGEC terhadap Profitabilitas pada Perusahaan Perbankan Periode 2015-2019," *Dynamic Management*

profits sustainably.¹¹ Capital indicates the bank's capitalization strength in bearing risks and supporting business growth.¹²

Economic growth reflects an increase in economic activity, which drives higher demand for financing, business expansion, and the potential for increased bank profitability.¹³ With rapid economic growth, the demand for credit can grow, raising interest income and bank profitability. However, when economic growth slows, especially during a recession, credit quality can deteriorate, increasing the risk of default and ultimately reducing bank profitability.¹⁴

Economic freedom reflects the degree of freedom in the production, distribution, and consumption of goods and services.¹⁵ Abbas, et. al., (2024)¹⁶ found that high economic freedom in a growing economy can improve bank efficiency and profitability. When economic freedom is high, GCG practices can be carried out more transparently, risk management becomes more flexible, and capital is more easily obtained through open financial markets; thus, the impact on profitability is even more substantial.

As a developing nation with the fourth-largest population globally, Indonesia exhibits distinctive characteristics in its financial system, particularly evidenced by the sustained expansion of Islamic banking over the past decade.¹⁷ The consistent growth of the sector highlights its strategic significance in promoting national financial stability and inclusion.¹⁸ This context renders Indonesia an intriguing case for examining how macroeconomic factors, such as economic growth and economic freedom, influence the profitability of Islamic banks. Nevertheless, empirical

Journal, Vol. 6, No. 2 (2022), 110–21; Vania Aghani Hanin Zahra and Nafis Irkhami, "Analisis Pengaruh Mekanisme Good Corporate Governance, Financing to Deposit Ratio, dan Ukuran Perusahaan Terhadap Profitabilitas dengan Corporate Social Responsibility Sebagai Variabel Moderasi pada Perbankan Syariah di Indonesia Periode 2015-2019," *Nisbah: Jurnal Perbankan Syariah*, Vol. 7, No. 1, (2021), 23–30.

¹¹ Erna Setiawati, Alifah Sekarningrum, and Banu Witoro, "Analysis of CSR Disclosure, Earnings Persistency, Earnings Growth, and Business Size on Earnings Management with Institutional Ownership as a Moderating Variable (Case Study on LQ45 Companies Listed on the Indonesia Stock Exchange (IDX) 2016-2020)," *Riset Akuntansi dan Keuangan Indonesia* Vol. 7, No. 2 (2023), 227–43; Zumratul Meini and Sylvia Veronica Siengar, "The Effect of Accrual Earnings Management and Real Earnings Management on Earnings Persistence and Cost of Equity," *Journal of Economics, Business, and Accountancy Ventura*, Vol. 17, No. 2, (2014), 269.

¹² Chairuddin Surya Putra, Harlen, and Machasin, "Pengaruh Modal Fisik, Modal Finansial, dan Modal Intelektual Terhadap Kinerja Perusahaan (Studi Kasus pada Perusahaan Food and Beverages yang Terdaftar di BEI Tahun 2009-2013)," *Jurnal Ekonomi*, Vol. 22, No. 3, (2014), 16–32.

¹³ Rony Arpinto Ady, "Pengaruh Makroekonomi Terhadap Profitabilitas Perbankan di Indonesia," *Research Fair Unisri*, Vol. 4, No. 1 (2020), 115–26; Zulfa Muasaroh Binti Rahmawati, Titis Miranti, and Ulfi Kartika, "Do Political Risks Influence Sharia Bank Stability? The Case of Southeast Asia," *Shirkah: Journal of Economics and Business* Vol.10, No.2 (2025), 294–311.

¹⁴ Rony Arpinto Ady, "Pengaruh Makroekonomi Terhadap Profitabilitas Perbankan di Indonesia," *Research Fair Unisri*, Vol. 4, No. 1 (2020): 115–26; Zulfa Muasaroh Binti Rahmawati, Titis Miranti, and Ulfi Kartika, "Do Political Risks Influence Sharia Bank Stability? The Case of Southeast Asia," *Shirkah: Journal of Economics and Business* Vol.10, No.2 (2025), 294–311.

¹⁵ Anthony B Kim, "The Index of Economic Freedom," *The Heritage Foundation*, 2025, <https://www.heritage.org/index/pages/about>; Faisal Abbas et al., "Capital and Profitability: The Moderating Role of Economic Freedom," *Heliyon*, Vol. 10, No. 16 (2024), 35253.

¹⁶ Nguyen Tan Hung, Tran Thi Kim Oanh, and Chu Thi Thanh Trang, "The Impact of Economic Freedom on Economic Growth in Countries with High and Low Regulatory Quality —Lessons for Viet Nam," *Humanities and Social Sciences Communications*, Vol. 11, No. 1 (2024).

¹⁷ Fatimah Tuzzuhro, Noni Rozaini, and Muhamad Yusuf, "Perkembangan Perbankan Syariah di Indonesia Fatimah," *PeKA: Jurnal Pendidikan Ekonomi Akuntansi*, Vol. 11, No. 2 (2023), 78–87.

¹⁸ Erna May Wulandari and Maya Indriastuti, "Digital Transformation in the Economic Growth of Indonesian Sharia Bank Services," *Islamic Economics Journal*, Vol. 09, No. 02 (2023), 39–54.

research exploring the relationship between these macroeconomic variables and the profitability of Islamic banks in Indonesia remains notably scarce.

This study is crucial in addressing the existing research gap. The originality of this research is demonstrated through its examination of the impact of economic freedom and economic growth on the profitability of Islamic banks in a developing country where the Islamic financial system is experiencing rapid expansion.¹⁹ This study further contributes to the literature by examining whether the interplay between economic freedom and economic growth fosters a more favorable environment for Islamic banks to improve their profitability.

Literature Review

Signaling Theory

Signaling Theory elucidates the mechanisms by which parties possessing superior information, such as bank managers, communicate with external entities, including investors, regulators, and the general public, to mitigate information asymmetry.²⁰ A bank's health serves as a key signal sent by management to stakeholders to demonstrate the bank's ability to manage assets, liquidity, and risk, which ultimately affects profitability and increases investor and public confidence.²¹ This signal can be amplified by macroeconomic conditions and the degree of economic freedom. In times of strong economic growth or high economic freedom, positive signals from bank health are more easily received by the market, thus having a greater impact on profitability.²² Profitability serves as a crucial indicator of a company's success and sustainability, as it demonstrates the capacity to generate profit from its available resources.²³ A robust level of profitability serves as a favorable indicator for both customers and investors, demonstrating the company's capacity to reinvest, fulfill its financial obligations, and distribute dividends to shareholders. An enhancement in profitability bolsters the confidence of customers and investors in a banking system that adheres to Sharia principles.²⁴

Macroeconomics Theory

Macroeconomic theory is a field of economics that studies the behavior and performance of the economy as a whole. It covers variables such as economic growth, inflation, unemployment rate, balance of trade, as well as fiscal and monetary policy.

¹⁹ Fatimah Tuzzuhro, Nori Rozaini, and Muhamad Yusuf, "Perkembangan Perbankan Syariah Di Indonesia Fatimah," *PeKA: Jurnal Pendidikan Ekonomi Akuntansi*, Vol. 11, No. 2 (2023), 78–87.

²⁰ Michael Spence, "Job Market Signaling," *The Quarterly Journal of Economics*, Vol. 87, No. 3 (1973), 355–74. <https://www.jstor.org/stable/1882010>.

²¹ Setiawan, Setiawan, Leni NurPratiwi, and Rani Putri Kusuma Dewi, "Efisiensi Operasional, Makroekonomi, dan Profitabilitas Pada Perbankan Syariah di Indonesia." *Jurnal Ilmiah Akuntansi Dan Keuangan*, Vol. 04, No. 01 (2021), 40–45.

²² Blaga, Florin, Bogdan Andrei Dumitrescu, Ioana Duca, Ionel Leonida, and Dalia Poleac, "Analyzing the Determinants of Banking Profitability in European Commercial Banks: Do Covid-19 Economic Support Measures Matter?," *Sustainability (Switzerland)* Vol. 16, No. 16 (2024).

²³ Evy Ratnasari, "Upaya Peningkatan Profitabilitas Usaha," *FOKUS : Publikasi Ilmiah Untuk Mahasiswa, Staf Pengajar dan Alumni Universitas Kapuas Sintang*, Vol. 18, No. 1 (2020), 25–34.

²⁴ Anam, Hairul, Hendika SL, and Bani Anhar. "Tingkat Kesehatan Bank dengan Metode RGEC." *Jurnal Geo Ekonomi*, Vol. 13, No. 1 (2022), 116–27.

This theory examines how these factors affect business activities and the financial sector on a national scale. The modern approach to macroeconomic theory not only views the relationships between economic variables within a simple linear framework, but also as a complex system that interacts with one another.²⁵ In the context of Islamic banking, the soundness of a bank as an internal strength can influence profitability, but this effect is inseparable from the macroeconomic landscape shaped by economic growth and the level of economic freedom²⁶. When the economy grows rapidly and business conditions improve, companies tend to experience increased profitability because consumers' purchasing power rises and business activities expand.²⁷ The higher the economic freedom score, the less government intervention there is and the more efficient and competitive the country's economy becomes.²⁸

Bank Health Performance

Bank health assessments are conducted using the RGEC method with a risk-based approach, which includes four main components: risk profile, Good Corporate Governance (GCG), earnings, and capital.²⁹ Risk profile is an analysis that determines the type and level of risk faced by a company, individual, or asset. In Islamic banking, credit risk and liquidity risk are measured using the Non-Performing Financing (NPF) indicator.³⁰ GCG refers to the principles of corporate governance implemented to ensure transparency, accountability, responsibility, independence, and fairness in conducting business activities. The principles of GCG include transparency, accountability, responsibility, independence, and fairness.³¹ Earning is the income obtained by an individual or company over a certain period after all expenses and taxes have been deducted. Earnings reflect a company's net profit after all expenses, including interest and taxes, have been subtracted from total revenue.³² Capital (modal) is anything that can be used by a business to grow and add value. In this aspect, what is assessed is the adequacy of a bank's capital to anticipate losses.³³

²⁵ Pablo Paniagua, "Complexity Defying Macroeconomics," *Cambridge Journal of Economics* Vol. 47, No. 3 (2023), 575–92.

²⁶ Ayunseh Retno Harini, Mahrus Lutfi Adi Kurniawan, and Budi Jaya Putra, "Do Macroeconomic Variables Affect Deposits in Shariah Banks?," *Islamic Economics Journal* Vol. 10, No. 1 (2024), 61–71.

²⁷ Tri Cahyo Beriwisnu and Maswar Patuh Priyadi, "Pengaruh Pertumbuhan Ekonomi, Industri dan Kinerja Keuangan Terhadap Nilai Perusahaan," *Jurnal Ilmu dan Riset Akuntansi*, Vol. 6, No. 12 (2018), 2–14.

²⁸ Agustina Suparyati, "Dampak Kebebasan Ekonomi Terhadap Pertumbuhan Ekonomi," *Media Ekonomi*, Vol. 22, No. 3 (2014), 221–40.

²⁹ Safira, Wahyu Izza, and Esy N. "Analisis Tingkat Kesehatan Bank Syariah Serta Dampaknya terhadap Nilai Perusahaan Analysing the Health of Islamic Banks and Its Impact on Firm Value." *Jurnal Perbankan Syariah*, Vol. 10, No. 1 (2024), 85–93.

³⁰ Alaamsah, Raden Hario Daffa, Fitri Yetti, Prima Dwi Priyatno, "Pengaruh NPF, CAR, dan FDR Terhadap Profitabilitas Bank Umum Syariah di Indonesia 1,2,3," *EL-IQTHISHOD*, Vol. 5, No. 2 (2021), 19–46.

³¹ Endratmoko, "Good Corporate Governance (Gcg) on PT. Bank Rakyat Indonesia (Persero) Tbk," *Dijems*, Vol. 1, No. 5 (2020), 638–48.

³² Ikatan bankir indonesia (IBI), *Pedoman dan Strategi Audit Intern Bank*, ed. Fajarianto; Isran Febrianto (Jakarta pusat: PT. Gramedia Pustaka Utama, 2020).

³³ Amir Kusnanto, "Risk Profile, Good Corporate Governance, Earning, Capital (Rgec) Method Sebagai Instrumen Pengukur Tingkat Kesehatan Perbankan Syariah di Indonesia," *Jurnal Administrasi Bisnis*, Vol. 6, No. 2 (2018), 124–136.

Hypothesis

The Influence of Risk Profile on Profitability

The risk profile of a company delineates the extent of risk undertaken, particularly in the realms of financing and investment activities. A higher risk profile is associated with the potential for greater profit; however, it concurrently entails an elevated risk of loss. Consequently, effective risk management is crucial for sustaining and enhancing a company's profitability. The assertion that the risk profile influences increases or decreases is corroborated by several prior studies, such as Augusto, (2021)³⁴, Aryani & Setiawan (2024)³⁵, Fajari & Sunarto (2017)³⁶, Putri & Yuliandhari (2020)³⁷, Rohmah & Nasir (2023)³⁸, and Widyastuti & Aini (2021).³⁹

According to this explanation, the initial hypothesis of this study posits that the Risk Profile exerts a significant influence on Profitability (H1).

The Influence of Good Corporate Governance (GCG) on Profitability

Effective risk management can enhance investor confidence and reduce the likelihood of conflicts of interest and the misappropriation of company assets, thereby optimizing profitability. Previous research has indicated that the implementation of Good Corporate Governance (GCG) is positively correlated with increased profitability.⁴⁰

According to this explanation, the second hypothesis of this study posits that GCG exerts a significant influence on Profitability (H2).

The Influence of Earnings on Profitability

The likelihood of a company achieving profitability is closely associated with the magnitude of its earnings. Earnings serve as a measure of the company's capacity to generate revenue. Prior studies indicate that a consistent upward trend in earnings

³⁴ Augusto Hasiholan Rafried Sihite Augusto, "Pengaruh Capital Adequacy Ratio (CAR) dan Financing to Deposit Ratio (FDR) Terhadap Profitabilitas Bank Umum Syariah di Indonesia," *Maro: Jurnal Ekonomi Syariah dan Bisnis* Vol. 4, No. 2 (2021), 1–8.

³⁵ Aryani, Sania Nisa, and Iwan Setiawan. "Analisis Pengaruh Risk Profile Terhadap Profitabilitas Unit Usaha Syariah pada Tahun 2015-2023." *Journal of Applied Islamic Economics and Finance*, Vol. 4, No. 3 (2024), 463–474.

³⁶ Slamet Fajari and Sunarto, "Pengaruh CAR, LDR, NPL, BOPO Terhadap Profitabilitas Bank (Studi Kasus Perusahaan Perbankan Yang Terdaftar di Bursa Efek Indonesia Periode Tahun 2011 Sampai 2015)," *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers UNISBANK Ke-3*, No. 3 (2017), 853–862.

³⁷ Devi Allisy Putri and Willy Sri Yuliandhari, "Pengaruh Tingkat Kesehatan Keuangan Bank Menggunakan Rgec Terhadap Pertumbuhan Laba," *Jurnal Akuntansi Bisnis Dan Ekonomi* Vol. 6, No. 1 (2020): 1569–1576.

³⁸ Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas dengan Menggunakan Metode Rgec Pada Bank Pemerintah Dan Bank Swasta Yang Terdaftar di BEI Periode 2017-2021." *Innovative* Vol. 3, No. 5 (2023), 5238–53.

³⁹ Pricilla Febryanti Widyastuti and Nur Aini, "Pengaruh CAR, NPL, LDR Terhadap Profitabilitas Bank (ROA) Tahun 2017-2019," *Jurnal Ilmiah Mahasiswa Akuntansi Universitas Pendidikan Ganesha* Vol. 12, No. 03 (2021), 2614–1930.

⁴⁰ Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank terhadap Profitabilitas dengan Menggunakan Metode Rgec pada Bank Pemerintah dan Bank Swasta yang Terdaftar di BEI Periode 2017-2021." *Innovative* Vol. 3, No. 5 (2023), 5238–53; Sarra, Hustna Dara, Mikrad Mikrad, and Sunanto. "Analisis Pengaruh Tingkat Kesehatan Bank Menggunakan Metode Rgec Terhadap Profitabilitas pada Perusahaan Perbankan Periode 2015-2019." *Dynamic Management Journal* Vol. 6, No. 2 (2022), 110–21; Zahra, Vania Aghari Hanir, and Nafis Irkhami. "Analisis Pengaruh Mekanisme Good Corporate Governance, Financing to Deposit Ratio, dan Ukuran Perusahaan terhadap Profitabilitas dengan Corporate Social Responsibility Sebagai Variabel Moderasi Pada Perbankan Syariah di Indonesia Periode 2015-2019." *Nisbah: Jurnal Perbankan Syariah* Vol. 7, No. 1 (2021), 23–30.

over successive years conveys a positive message to investors and underscores the company's financial stability.⁴¹

According to this explanation, the third hypothesis of this study posits that earnings exert a significant influence on profitability (H3).

The Influence of Capital on Profitability

A robust capital base enables companies to expand and enhance their production capacity. Adequate capital also assists companies in managing business risks and ensuring business continuity. An increase in capital is likely to be accompanied by a corresponding rise in profitability, and conversely, a decrease in capital may lead to a reduction in profitability.⁴²

In accordance with the preceding explanation, the fourth hypothesis of this study posits that capital exerts a significant influence on profitability (H4).

The Influence of Risk Profile on Profitability with Economic Growth as a Moderating Variable

The risk profile of a company delineates the extent of risk associated with its business operations. A high-risk profile typically exerts a detrimental effect on profitability, as it elevates the potential for financial losses.⁴³ The impact of a company's risk profile on its profitability is not invariably stable and may be influenced by economic growth, which acts as a moderating variable. Companies characterized by a high risk profile can still achieve profitability if they operate within a conducive economic environment.⁴⁴

⁴¹ Syukron Sazly, Fera Nelfianti, and Herudini Subariyanti, "Komparasi Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas Pada PT.Bank BCA,Tbk Dan PT.Bank BCA Syariah," *Jesya (Jurnal Ekonomi & Ekonomi Syariah)* Vol. 5, No. 1 (2022), 115–278; Slamet Fajari and Sunarto. "Pengaruh CAR, LDR, NPL, BOPO Terhadap Profitabilitas Bank (Studi Kasus Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2011 Sampai 2015)." *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers UNISBANK Ke-3, No.3* (2017), 853–862.; Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas dengan Menggunakan Metode RGEC Pada Bank Pemerintah dan Bank Swasta Yang Terdaftar Di BEI Periode 2017-2021." *Innovative* Vol. 3, No. 5 (2023), 5238–53; Sarra, Hustna Dara, Mikrad Mikrad, and Sunanto, "Analisis Pengaruh Tingkat Kesehatan Bank Menggunakan Metode Rgec terhadap Profitabilitas Pada Perusahaan Perbankan Periode 2015-2019," *Dynamic Management Journal*, Vol. 6, No. 2 (2022), 110–21.

⁴² Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas dengan Menggunakan Metode RGEC pada Bank Pemerintah dan Bank Swasta Yang Terdaftar di BEI Periode 2017-2021." *Innovative* Vol. 3, No. 5 (2023), 5238–53; Sarra, Hustna Dara, Mikrad Mikrad, and Sunanto. "Analisis Pengaruh Tingkat Kesehatan Bank Menggunakan Metode Rgec terhadap Profitabilitas Pada Perusahaan Perbankan Periode 2015-2019." *Dynamic Management Journal* Vol. 6, No. 2 (2022), 110–21; Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas dengan Menggunakan Metode RGEC pada Bank Pemerintah Dan Bank Swasta Yang Terdaftar di BEI Periode 2017-2021." *Innovative* Vol. 3, No. 5 (2023), 5238–53; Sarra, Hustna Dara, Mikrad Mikrad, and Sunanto. "Analisis Pengaruh Tingkat Kesehatan Bank Menggunakan Metode RGEC Terhadap Profitabilitas Pada Perusahaan Perbankan Periode 2015-2019." *Dynamic Management Journal* Vol. 6, No. 2 (2022), 110–21.

⁴³ Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas dengan Menggunakan Metode RGEC Pada Bank Pemerintah Dan Bank Swasta Yang Terdaftar di BEI Periode 2017-2021." *Innovative*, Vol. 3, No. 5 (2023), 5238–53.

⁴⁴ Berliana Fadhilatun Nisak, *Pengaruh Non Performing Loan dan Capital Adequacy Ratio Terhadap Profitabilitas dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi Pada Korvensional di BEI Tahun 2015-2019*, Universitas Islam Negeri, 2021; Marihot Simanjuntak and Benny Rojeston Marnæk Nainggolan, "Pengaruh DPK, CAR, LDR Terhadap Kinerja Keuangan Dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi pada Sektor Perbankan Yang Terdaftar di Bursa Efek Indonesia Periode 2016-2020," *Management Studies and Entrepreneurship Journal*, Vol. 3, No. 2 (2022): 525–537.

In accordance with the preceding explanation, the fifth hypothesis of this study posits that Economic Growth significantly moderates the relationship between Risk Profile and Profitability (H5).

The Influence of Good Corporate Governance (GCG) on Profitability with Economic Growth as a Moderating Variable

The impact of Good Corporate Governance (GCG) on profitability is not invariably consistent; it may be influenced by external factors, such as economic growth. According to economic theory, robust economic growth can enhance the positive effects of GCG on profitability by increasing demand and expanding market opportunities.⁴⁵

In accordance with the preceding explanation, the sixth hypothesis posited in this study is as follows: Economic Growth significantly moderates the impact of GCG on Profitability (H6).

The Influence of Earnings on Profitability with Economic Growth as a Moderating Variable

The relationship between earnings and profitability can be influenced by external factors, one of which is economic growth. Several studies indicate that earnings exert a negative impact on profitability.⁴⁶ Continued economic growth, as measured by Gross Domestic Product (GDP), has the potential to mitigate the adverse effects of suboptimal earnings on profitability. Should Islamic banks sustain operational efficiency during periods of economic expansion, their profitability is likely to experience substantial enhancement, thereby enabling them to effectively compete with conventional banking institutions.⁴⁷

In accordance with the preceding explanation, the seventh hypothesis posited in this study is as follows: Economic Growth significantly moderates the impact of Earnings on Profitability (H7).

The Influence of Capital on Profitability with Economic Growth as a Moderating Variable

The impact of capital on profitability can be influenced by economic growth. Economic growth has the potential to enhance the effect of capital on profitability, as substantial and robust capital can be fully leveraged due to increasing market demand, expanded investment opportunities, and improved access to external financing.⁴⁸

⁴⁵ Lestari Adhi Widyowati, Inta Hartaningtyas Rani, and JaraHardiyanti Jali, "Pengaruh Mekanisme Good Corporate Governance (GCG) Terhadap Nilai Perusahaan dengan Manajemen Laba Sebagai Variabel Intervening pada Perusahaan Otomotif Yang Terdaftar di BEI 2015-2018," *Jurnal Riset Akuntansi Dan Manajemen* Vol. 9, No. 2 (2020): 175-83."

⁴⁶ Sarra, Hustna Dara, Mikrad Mikrad, and Sunanto Sunanto. "Analisis Pengaruh Tingkat Kesehatan Bank Menggunakan Metode Rgec Terhadap Profitabilitas Pada Perusahaan Perbankan Periode 2015-2019." *Dynamic Management Journal*, Vol. 6, No. 2 (2022), 110-21.

⁴⁷ Setiawan, Setiawan, Leni NurPratiwi, and RaniPutri Kusuma Dewi. "Efisiensi Operasional, Makroekonomi, dan Profitabilitas Pada Perbankan Syariah di Indonesia." *Jurnal Ilmiah Akuntansi dan Keuangan*, Vol. 4, No. 01 (2021), 40-45."

⁴⁸ Nisak, *Pengaruh Non Performing Loan Dan Capital Adequacy Ratio Terhadap Profitabilitas Dengan Pertumbuhan*

In accordance with the preceding explanation, the eighth hypothesis posited in this study is as follows: Economic Growth significantly moderates the impact of Capital on Profitability (H8).

The Influence of Risk Profile on Profitability with Economic Freedom as a Moderating Variable

Economic freedom functions as a moderating variable that can enhance the relationship between risk profile and profitability. In countries or regions characterized by high levels of economic freedom, supported by favorable regulations, protection of property rights, and efficient financial markets, banks have increased opportunities to manage risks effectively and capitalize on market opportunities, thereby mitigating the adverse impact of risk profile on profitability.⁴⁹

In accordance with the aforementioned explanation, the ninth hypothesis posited in this study is as follows: Economic Freedom significantly moderates the impact of Risk Profile on Profitability (H9).

The Influence of GCG on Profitability with Economic Freedom as a Moderating Variable

Economic freedom can enhance the impact of Good Corporate Governance (GCG) on profitability. In countries or regions characterized by high economic freedom, the implementation of GCG is facilitated by efficient regulations, the protection of property rights, and a competitive market environment. Conversely, in areas with low economic freedom, complex bureaucratic processes and less efficient markets may impede the effectiveness of GCG.⁵⁰

In accordance with the preceding explanation, the tenth hypothesis of this study posits that Economic Freedom significantly moderates the impact of GCG on Profitability (H10).

The Influence of Earnings on Profitability with Economic Freedom as a Moderating Variable

Economic freedom pertains to the autonomy of individuals and enterprises to make economic decisions without undue governmental interference. This encompasses freedom of trade, investment freedom, regulatory efficiency, and the safeguarding of property rights. Elevated levels of economic freedom can enhance the impact of earnings on profitability, as a favorable business environment encourages banks to optimize resource utilization, expand markets, and improve efficiency.⁵¹

Ekonomi Sebagai Variabel Moderasi Pada Konvensional di BEI Tahun 2015-2019; Nikmatul Rochmah and Puji Endah Purnamasari, "The Influence of Bank Health and Interest Rates on Bank Profitability and Moderated By Economic Growth," *Ekonomis: Journal of Economics and Business* Vol. 7, No. 2 (2023), 1389–96.

⁴⁹ Abbas, Faisal, Shoaib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon* Vol. 10, No. 16 (2024), 35253.

⁵⁰ Lubis, Rukiah, Wanda Khairun Nasirin, and Ananda Anugrah Nasution. "The Relationship between Foreign Direct Investment, Islamic Financial Performance and Economic Growth with Economic Freedom as Moderating Variable." *International Journal of Islamic Business and Economics (IJIBEC)*, Vol. 7, No. 1 (2023), 49–63.

⁵¹ Abbas, Faisal, Shoaib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon* Vol. 10, No. 16 (2024), 35253.

In accordance with the preceding explanation, the eleventh hypothesis of this study posits that Economic Freedom significantly moderates the relationship between Earnings and Profitability (H11).

The Influence of Capital on Profitability with Economic Freedom as a Moderating Variable

Economic freedom encompasses the liberty to engage in business activities, regulatory efficiency, openness to trade, and the safeguarding of property rights. Elevated levels of economic freedom can enhance the impact of capital on profitability, as banks with robust capital reserves are better positioned to capitalize on investment opportunities, expand their business networks, and optimize returns within a conducive business environment.⁵²

In accordance with the preceding explanation, the twelfth hypothesis posited in this study is as follows: Economic Freedom significantly moderates the impact of Capital on Profitability (H12).

This research model adopts the conceptual framework design from Ahmad, et. al. (2024)⁵³ which integrates two moderating variables into a single model, thereby allowing for a more comprehensive analysis of the interaction between the independent and dependent variables.

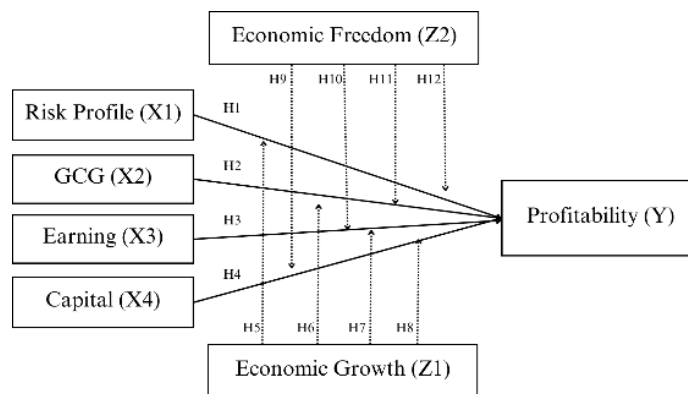


Figure 2. Conceptual Framework

Source: Processed by the researcher, 2025

Methodology

This study uses a quantitative method with an associative approach, focusing on Sharia Commercial Banks in Indonesia that are registered with the Financial Services Authority (OJK). The data used was obtained from the official websites of each bank, the Financial Services Authority website (ojk.go.id), the World Bank,

⁵² Abbas, Faisal, Shoaib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon* Vol. 10, No. 16 (2024), 35253.

⁵³ Haseeb Ahmad, Junaid Sadeeqe, Umar Farooq, Umar Hayat, and Uzma Haroon. "Fiscal Policy Determinants Impact on the Economic Growth With the Moderating Role of the Exchange Rate and Inflation Rate: Evidence From an Emerging Economy." *Journal of Excellence in Management Sciences* Vol. 3, No. 3 (2024), 68-81.

and the Central Statistics Agency (BPS). The research population includes all Sharia Commercial Banks in Indonesia that have been registered with the Financial Services Authority (OJK) for the 2011-2024 period, using the saturated sampling technique. Based on OJK publication data in 2024, there are 14 Sharia Commercial Banks in the population.

This study uses panel data regression analysis and moderating regression analysis. The panel data regression method is employed due to its ability to enhance the degrees of freedom, thereby addressing the issue of omitted variables and mitigating estimation bias.⁵⁴ Moderation regression analysis was selected as it enables researchers to examine how a variable modulates the relationships between variables within a panel context, thereby offering a more comprehensive understanding of the conditions that affect the primary effects.⁵⁵ The research uses R studio and Microsoft Excel software. R Studio was chosen because it gives more accurate and clear results. R offers better checks for assumptions and reliability, helping to estimate complex economic models precisely. Also, its strong data processing and visualization skills make the analysis results more reliable and informative.⁵⁶

The analytical stages in this study follow established empirical procedures, beginning with the selection of the appropriate regression model, namely the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM), followed by classical assumption testing, linear regression analysis, and moderated regression analysis (MRA), before drawing conclusions.⁵⁷

Result and Discussion

Descriptive Statistical Analysis

This study uses all Islamic Commercial Banks as its subjects for the period 2011–2024, with a total of 148 observations.

Table 1. Descriptive Statistical Analysis

Description	NPF (X1)	GCG (X2)	BOPO (X3)	CAR (X4)	ROA (Y)	GDP (Z1)	EF (Z2)
Min	0,00	1,00	56,16	11,51	-20,13	-2,07	56,00
Max	4,95	3,00	354,75	241,84	13,58	6,17	67,20
Mean	1,60	1,76	94,46	30,56	1,03	4,48	62,41
Std. Defiasi	1,53	0,49	34,42	30,21	3,83	2,02	3,55

Source: processed by the researcher with Rstudio, 2025

In this study, Non-Performing Financing (NPF), Good Corporate Governance (GCG), Operating Expenses to Operating Income (BOPO), and Capital Adequacy Ratio (CAR) are employed as RGEC indicators to assess bank health, while Return

⁵⁴ Pardo muan Robinson Sihombing, "Analisis Regresi Data Panel," in *Statistik Multivariat dalam Riset* (Penerbit Wirdina, 2021), 95–111.

⁵⁵ SriSubanti and Nabila Tri Amanda, "Analysis of Unemployed Youth In Indonesia By Panel Data Regression With Moderating Variable," *Jounar of the Indonesian Mathematical Society* Vol. 30, No. 03 (2024), 338–51.

⁵⁶ Christopher Gandrud, *Reproducible Research with Rand RStudio*, Second Edi (London: CPC Press Taylor & Francis Group, 2015).

⁵⁷ Ulfi Kartika Oktaviana, Tiara Juliana Jaya, and Titis Miranti, "The Role of Islamic Social Reporting, Islamic Corporate Governance and Maqashid Syariah Index on Firm Value with Firm Size as Moderation Variable," *Proceedings of the International Conference on Engineering, Technology and Social Science (ICONETOS 2020)*, No. 529 (2021), 195–201.

on Assets (ROA) serves as a measure of profitability. Concurrently, Gross Domestic Product (GDP) and Economic Freedom (EF) are utilized to represent economic growth and the degree of economic freedom, respectively, as macroeconomic variables influencing the relationship between bank health and profitability.

The minimum NPF value of 0.00 at Bank BCA Syariah in the years 2011–2013 and 2023 indicates that during those periods there were no problematic financings. This demonstrates the bank’s ability to manage risk and maintain good financing quality. The minimum ROA value of -20.13 reflects a significant loss experienced by Bank Aladdin Syariah in 2015. This loss was caused by high operational costs and an increase in problematic financing. The minimum GDP value of -2.07 depicts an economic contraction. This negative GDP decline was caused by the Covid-19 pandemic. Meanwhile, the highest value of 6.17 reflects a period of strong economic growth and the highest GDP value in the past decade. Furthermore, the Economic Freedom value, which ranges from 56.00 to 67.20, shows that Indonesia falls into the moderately free category, where there has been progress in economic freedom, but there are still regulatory and market efficiency challenges that need continuous improvement.⁵⁸

Regression Model Selection Test

To ascertain the most suitable model, it is imperative to conduct a series of tests. Initially, the Chow test (Table 2.) is employed to decide between the CEM and FEM models, followed by the Hausman test (Table 3.) to compare FEM with REM. Should these tests fail to identify an appropriate model, the final step involves the LM test, which serves to compare CEM with REM.

Chow Test

Table 2. Chow Test Result

<u>F</u>	<u>df1</u>	<u>df2</u>	<u>p-value</u>
8.727	13	130	0.000000001367

Source: processed by the researcher with Rstudio, 2025

Based on the results of the Chow test in Table 2., a p-value of 0.000000001367 < 0.05 was obtained, so the selected regression model is the Fixed Effect Model (FEM).

Hausman Test

Table 3. Hausman Test Result

<u>Chisq</u>	<u>df</u>	<u>p-value</u>
9.976	3	0.01877

Source: processed by the researcher with Rstudio, 2025

Based on the results of the Hausman test in Table 3., a p-value of 0.01877 < 0.05 was obtained, thus the chosen regression model is the Fixed Effect Model (FEM).

⁵⁸ Heritage Foundation, “Economic Freedom Country Profile Indonesia,” *Heritage.org*, 2025, <https://www.heritage.org/index/pages/country-pages/indonesia>.

Classical Assumption Test

Prior to performing linear regression analysis, it is imperative to evaluate the classical assumptions. A robust regression model necessitates adherence to fundamental assumptions, including normality, multicollinearity, heteroscedasticity, and autocorrelation, to ensure that the resulting estimates are both valid and reliable.⁵⁹

Normality Test

Table 4. Normality Test Result

Jarque-Bera	P-Value
4,7804	0.09161

Source: processed by the researcher with Rstudio, 2025

Based on the results of the normality test in Table 4 the Jarque-Bera statistic is 4.7804 and the p-value is 0.09161, which is greater than 0.05. Therefore, it can be concluded that the data used is normally distributed.

Multicollinearity Test

Table 5. Multicollinearity Test Results

Variable	VIF
NPF (X1)	1,590556
GCG (X2)	1,191480
BOPO (X3)	1,450143
CAR (X4)	1,478995
PDB (Z1)	1,421226
EF (Z2)	1,505074

Source: processed by the researcher with Rstudio, 2025

Based on the results of the multicollinearity test in Table 5, it can be concluded that there is no multicollinearity problem among the variables because the VIF value ≤ 0.10 .⁶⁰

Heteroscedasticity Test

Table 6. Heteroscedasticity Test Results

Studentized Breusch-Pagan test		
Breusch-Pagan	df	p-value
2,7834	4	0,5947

Source: processed by the researcher with Rstudio, 2025

Based on Table 6, it can be concluded that there is no heteroscedasticity among the variables or the variables are homogeneous, because the p-value is $0.5947 < 0.05$.

⁵⁹ Wilma Arum Nurcahya, Nadia Prasista Arisanti, and Audrey Nabilla Hanandhika, "Penerapan Uji Asumsi Klasik untuk Mendeteksi Kesalahan pada Data Sebagai Upaya Menghindari Pelanggaran pada Asumsi Klasik," *Madani: Jurnal Ilmiah Multidisiplin* Vol. 1, No. 12 (2023), 472–81.

⁶⁰ Nurcahya, Wilma Arum, Nadia Prasista Arisanti, and Audrey Nabilla Hanandhika. "Penerapan Uji Asumsi Klasik untuk Mendeteksi Kesalahan Pada Data Sebagai Upaya Menghindari Pelanggaran Pada Asumsi Klasik." *Madani: Jurnal Ilmiah Multidisiplin* Vol. 1, No. 12 (2023), 472–481.

Autocorrelation Test

Table 7. Autocorrelation Test Results

Breusch-Godfrey test		
LM Test	df	p-value
7,0016	3	0,07185

Source: processed by the researcher with Rstudio, 2025

Based on the results of the autocorrelation test in Table 7, the p-value is 0.07185 > 0.05, so it can be concluded that there is no autocorrelation between the variables.

Test of Determination Coefficient

The coefficient of determination test can be seen through the R-squared value, which is used to determine how much the independent variables can comprehensively explain the dependent variable.⁶¹ The results of the coefficient of determination test show an R-Squared value of 0.83074. This means that the variables NPF, GCG, BOPO, and CAR can explain the dependent variable, namely profitability (ROA), by 83.1%.

Hypothesis Testing and Moderated Regression Analysis (MRA)

The T-test is conducted to determine whether the independent variable has an effect on the dependent variable. The decision rule for the T-test is that if the probability is less than the significance level.⁶² Moderation regression analysis is employed to assess the impact of a moderating variable on the relationship between an independent variable and a dependent variable. The identification of the moderating variable is determined by the probability value.⁶³ In this study, the standard error value is 10% or 0.1.⁶⁴

Table 8. T-Test and MRA Test Results

Variable	Coefficient	Std. Error	t-value	P-Value	Hypothesis
NPF (X1)	4.654	2.4656	1.887	0.0615	Accepted
GCG (X2)	-7.706	6.2638	-1.230	0.2210247	Rejected
BOPO (X3)	-1.185	0.1570	-7.546	9.58E-09	Accepted
CAR(X4)	-0.4596	0.2052	-2.239	2.70E-02	Accepted
NPF*PDB	-0.1631954	0.0689	-2.3688	0.019443	Accepted
GCG*PDB	0.2495278	0.1947	1.2817	0.2024251	Rejected
BOPO*PDB	0.0288602	0.0070	4.1127	7.20E-02	Accepted
CAR*PDB	0.0084227	0.0041	2.0661	0.0409732	Accepted
NPF*EF	-0.0621105	0.0364	-1.7071	0.0903962	Accepted
GCG*EF	0.1058356	0.0936	1.1312	0.260246	Rejected

⁶¹ Imam Ghozali, *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 Edisi 9*, ed. Abadi Tejkusumo, 9th ed. (Semarang: Badan Penerbit Universitas Diponegoro, 2018).

⁶² Reza Akbar, U. Sulia Sukmawati, and Khairul Katsirin, "Analisis Data Penelitian Kuantitatif," *Jurnal Pelita Nusantara*, Vol. 1, No. 3 (2024): 430–48.

⁶³ Ghozali, Imam. *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 Edisi 9*. Edited by Abadi Tejkusumo. 9th ed. Semarang: Badan Penerbit Universitas Diponegoro, 2018.

⁶⁴ Nur Fadilah Amin, Sabaruddin Garancang, and Kamaluddin Abunawas, "Konsep Umum Populasi dan Sampel dalam Penelitian," *Jurnal Pilar: Jurnal Kajian Islam Kontemporer* Vol. 14, No. 1 (December 17, 2023): 15–31, <https://www.ojsstikesbanyuwangi.com/index.php/PHJ/article/view/283>.

BOPO*EF	0.0150387	0.0021	7.0128	1.48E-07	Accepted
CAR*EF	0.006808	0.0030	2.2941	0.0235233	Accepted

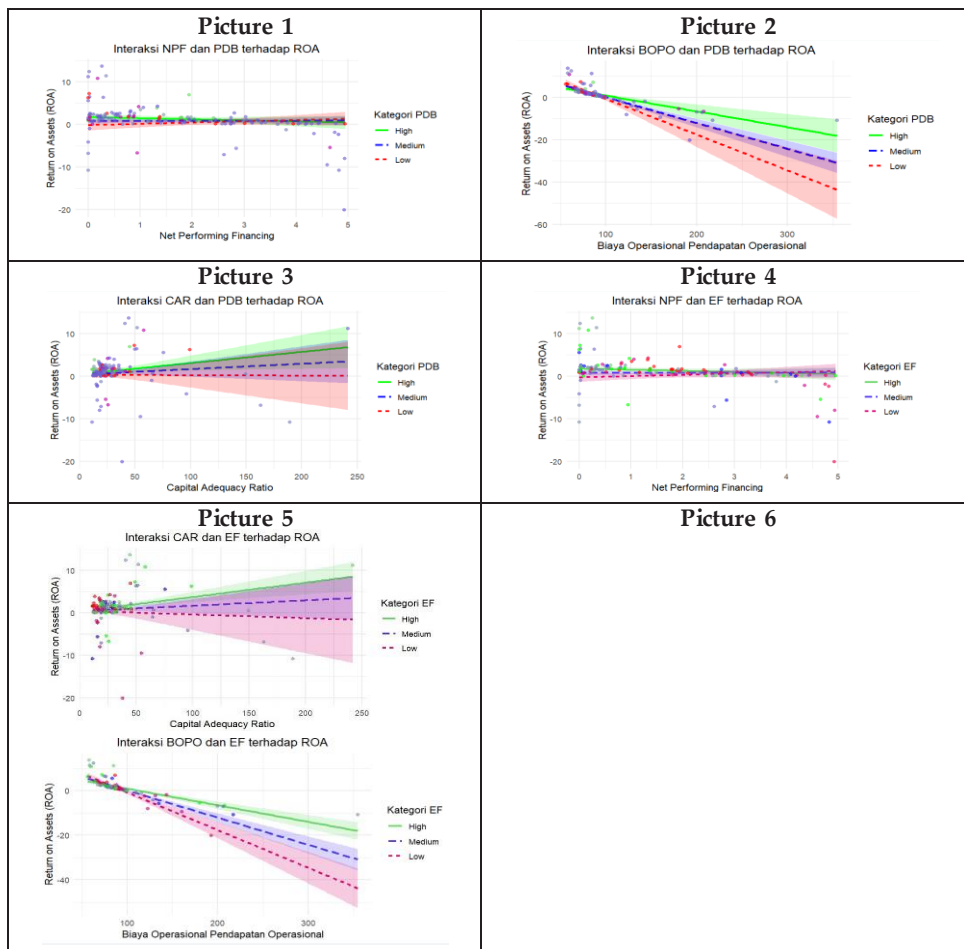
Source: Processed by the researcher, 2025

Based on the results in the T-test and MRA test table, the variables NPF, BOPO, and CAR have a significant effect on profitability, while the GCG variable does not have a significant effect on profitability. The interaction of the moderating variables shows that economic growth and economic freedom are able to significantly moderate the influence of NPF, BOPO, and CAR variables on profitability. This indicates that economic growth and economic freedom can strengthen or weaken the influence of these three variables on the dependent variable. However, economic growth and economic freedom are not able to significantly moderate the influence of the GCG variable on profitability.

Plot of Moderated Regression Analysis (MRA) Results

The results of the MRA plot are presented to provide a visual representation of the direction and pattern of interactions between variables, thereby clarifying the interpretation of the moderation effects that occur within the research model.

Plot 1 Moderated Regression Analysis (MRA) Results



Source: Processed by the researcher, 2025

Based on the results of the Moderated Regression Analysis (MRA) plot in plot 1, it can be concluded that the variables of economic growth and economic freedom serve as moderators with varying effects on the relationship between the independent variables and ROA. The interaction of the economic growth variable with the NPF and BOPO variables shows that economic growth can weaken the negative influence of NPF and BOPO on profitability. Meanwhile, in the relationship between the CAR variable and profitability, economic growth acts as a moderating variable that strengthens the positive effect of CAR on profitability. The interaction of the economic freedom variable indicates that economic freedom serves as a moderating variable that strengthens the positive effect of CAR on profitability. The interaction of economic freedom with the BOPO and NPF variables shows that economic freedom weakens the negative influence of BOPO and NPF on profitability.

Discussion

The Influence of Risk Profile on Profitability

Based on the results of the T-test, it was found that NPF has a significant positive effect on profitability, so the first hypothesis (H1) is accepted. In practical theory, an increase in the NPF ratio can lead to a decrease in profitability due to the high number of non-performing loans⁶⁵. However, the results of this study show that an increase in NPF is actually also accompanied by an increase in profitability. An increase in NPF that is followed by an increase in profitability may indicate that the rise in NPF could originate from financing distributed to sectors with high risk levels but which yield substantial returns, thus still contributing positively to profitability.⁶⁶ In addition, an increase in NPF accompanied by a rise in ROA can also occur because the problematic financing refers to non-performing loans that can still be restructured and do not yet fall under defaulted financing.⁶⁷

An increase in NPF accompanied by a rise in ROA can be a positive signal to the market that the bank has good risk management and financing management capabilities. Although there is an increase in problematic financing, the bank is still able to maintain its profitability.⁶⁸ This research is in line with the study conducted

⁶⁵ Aryani, Sania Nisa, and Iwan Setiawan. "Analisis Pengaruh Risk Profile Terhadap Profitabilitas Unit Usaha Syariah Pada Tahun 2015-2023." *Journal of Applied Islamic Economics and Finance* Vol. 4, No. 3 (2024): 463-74.; Augusto, Augusto Hasiholan Rafried Sihite. "Pengaruh Capital Adequacy Ratio (CAR) Dan Financing To Deposit Ratio (FDR) Terhadap Profitabilitas Bank Umum Syariah di Indonesia." *Maro: Jurnal Ekonomi Syariah Dan Bisnis* Vol. 4, No. 2 (2021), 1-8; Putri, Devi Allisya, and Willy Sri Yuliandhari. "Pengaruh Tingkat Kesehatan Keuangan Bank Menggunakan Rgec Terhadap Pertumbuhan Laba." *Jurnal Akuntansi Bisnis Dan Ekonomi* Vol. 6, No. 1 (2020), 1569-76; Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas Dengan Menggunakan Metode Rgec Pada Bank Pemerintah dan Bank Swasta Yang Terdaftar di BEI Periode 2017-2021." *Innova tive* Vol. 3, No. 5 (2023), 5238-53; Widyastuti, Pricilla Febryanti, and Nur Aini. "Pengaruh CAR, NPL, LDR Terhadap Profitabilitas Bank (ROA) Tahun 2017-2019." *Jurnal Ilmiah Mahasiswa Akuntansi Universitas Pendidikan Ganesha* Vol. 12, No. 03 (2021), 1930-2614."

⁶⁶ Nurul Rahmi and Ratna Anggraini, "Pengaruh CAR, BOPO, NPF, dan CSR Disclosure Terhadap Profitabilitas Perbankan Syariah," *Jurnal Ilmiah Wahana Akuntansi*, Vol. 8, No. 2 (2013), 171-187.

⁶⁷ Ayu Wandhini and Melia Kusuma, "Pengaruh Manajemen Risiko Terhadap Kinerja Keuangan Bank Umum Syariah Periode 2019-2023," *Jurnal Perbankan Syariah* Vol. 10, No. 2 (2024), 199-209.

⁶⁸ Ninis Salsabila Maharani and Yudha Trishananto, "Pengaruh NPF Dan FDR Terhadap ROA Dengan CAR Sebagai Variabel Intervening Pada Bank Umum Syariah Di Indonesia Tahun 2019-2023," *Jurnal Keuangan Dan Perbankan*, Vol. 21, No. 2 (2025), 113-22.

by Fajari & Sunarto (2017)⁶⁹ which also states that the risk profile has a significant positive effect on profitability.

The Influence of Good Corporate Governance on Profitability

Based on the results of the T-test, it was found that Good Corporate Governance does not have a significant effect on profitability, therefore the second hypothesis (H2) is rejected. GCG does not have a significant influence on bank profitability because, although the implementation of GCG principles is important for maintaining good corporate governance and can indirectly drive bank profitability, the sample companies have generally implemented governance according to regulations, so the variation in GCG scores is not sufficient to affect profitability.⁷⁰ In addition, the benefits of implementing GCG tend to be long-term, namely maintaining investor trust, reputation, and business sustainability, so the direct impact on ROA is not clearly visible within the research period.

The implementation of GCG in companies is more often perceived as a signal of compliance with regulations and an effort to maintain reputation, rather than as a main factor determining profitability. The positive signal conveyed through the application of GCG has a greater impact on investor trust, long-term stability, and business sustainability.⁷¹ This research is in line with the study conducted by Putri & Yuliandhari (2020)⁷² and Rohmah & Nasir (2023)⁷³ which also states that Good Corporate Governance does not have a significant effect on profitability.

The Influence of Earnings on Profitability

Based on the results of the T-test, it was found that BOPO has a significant negative effect on profitability; therefore, the third hypothesis (H3) is accepted. In practical theory, a high BOPO ratio indicates less effective management of operational costs, which can lead to a decrease in profitability.⁷⁴ An increase in BOPO reflects a decline in the bank's efficiency in managing its resources. This condition indicates that any rise in operational costs that is not matched by an increase in revenue will undermine the bank's ability to generate profit. Empirically, this reflects managerial inefficiency, swelling operational expenses, or a decrease in income from productive assets, which ultimately leads to reduced profitability.⁷⁵ Good BOPO management is

⁶⁹ Fajari, Slamet, and Sunarto. "Pengaruh CAR, LDR, NPL, BOPO Terhadap Profitabilitas Bank (Studi Kasus Perusahaan Perbankan Yang Terdaftar di Bursa Efek Indonesia Periode Tahun 2011 Sampai 2015)." *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers UNISBANK Ke-3* No. 3 (2017): 853–862.

⁷⁰ Putri, Devi Allisya, and Willy Sri Yuliandhari. "Pengaruh Tingkat Kesehatan Keuangan Bank Menggunakan Rgec Terhadap Pertumbuhan Laba." *Jurnal Akuntansi Bisnis dan Ekonomi*, Vol. 6, No. 1 (2020), 1569–76.

⁷¹ Shyaila Anisa De Lavanda and Carmel Meiden, "Pengaruh Pengungkapan Tanggung Jawab Sosial dan Tata Kelola Perusahaan Terhadap Kinerja Keuangan," *Jurnal Akuntansi Dan Governance* Vol. 2, No. 2 (2022), 94.

⁷² Putri, Devi Allisya, and Willy Sri Yuliandhari. "Pengaruh Tingkat Kesehatan Keuangan Bank Menggunakan Rgec Terhadap Pertumbuhan Laba." *Jurnal Akuntansi Bisnis Dan Ekonomi*, Vol. 6, No. 1 (2020), 1569–76.

⁷³ Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas Dengan Menggunakan Metode Rgec Pada Bank Pemerintah Dan Bank Swasta Yang Terdaftar di BEI Periode 2017-2021." *Innovative* Vol. 3, No. 5 (2023): 5238–53.

⁷⁴ Fajari, Slamet, and Sunarto. "Pengaruh CAR, LDR, NPL, BOPO Terhadap Profitabilitas Bank (Studi Kasus Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2011 Sampai 2015)." *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers UNISBANK Ke-3* No. 3 (2017), 853–862.

⁷⁵ Sarra, Hustna Dara, Mikrad Mikrad, and Sunanto. "Analisis Pengaruh Tingkat Kesehatan Bank

crucial for banks. With effective BOPO management, banks can maintain efficiency and increase profitability, as well as send positive signals to investors and customers regarding the bank's financial health and performance outlook.

A high BOPO ratio conveys a negative signal to investors and stakeholders, as it indicates the bank's inefficiency in executing operational activities. In contrast, a low BOPO ratio suggests a positive signal, demonstrating the bank's ability to manage costs efficiently relative to the income generated. This operational efficiency serves as a crucial indicator for the market regarding management performance, thereby enhancing investor confidence.⁷⁶ This research is in line with the study conducted by Fajari & Sunarto (2017)⁷⁷, Sarra, et. al., (2022)⁷⁸, Sazly, et. al., (2022)⁷⁹ dan Rochmah & Purnamasari (2023)⁸⁰ which also states that Earning has a significant negative effect on profitability.

The Influence of Capital on Profitability

Based on the results of the T-test, it was found that CAR has a significant negative effect on profitability, thus the fourth hypothesis (H4) is accepted. In practical theory, high bank capital can indicate the bank's capital strength in bearing risks and supporting business growth.⁸¹ However, the results of this study actually show that a high CAR can lead to a decrease in profitability. This indicates that the bank is unable to utilize its capital efficiently to generate profit.⁸² In this situation, the bank tends to hold excess capital as a precautionary reserve, so funds that could otherwise be allocated for financing expansion or investment are not optimally absorbed. As a result, the efficiency of capital utilization decreases and profitability declines.⁸³

The negative influence of CAR on ROA indicates that high capital can be a negative signal for the market. This shows that the bank is unable to utilize its

Menggunakan Metode Rgec Terhadap Profitabilitas Pada Perusahaan Perbankan Periode 2015-2019." *Dynamic Management Journal*, Vol. 6, No. 2 (2022), 110–21.

⁷⁶ Adisa Aurelia and David Efendi, "Pengaruh Efisiensi Operasional, Kredit Bermasalah, dan Rasio Kecukupan Modal Pada Perbankan Di Jawa Timur Periode 2016-2021," *Jurnal Ilmu dan Riset Akuntansi*, Vol. 12, No. 12 (2023), 1–18.

⁷⁷ Fajari, Slamet, and Sunarto. "Pengaruh CAR, LDR, NPL, BOPO Terhadap Profitabilitas Bank (Studi Kasus Perusahaan Perbankan Yang Tercatat di Bursa Efek Indonesia Periode Tahun 2011 Sampai 2015)." *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers UNISBANK Ke-3 No. 3* (2017), 853–862.

⁷⁸ Sarra, Hustna Dara, Mikrad Mikrad, and Sunanto Sunanto. "Analisis Pengaruh Tingkat Kesehatan Bank Menggunakan Metode Rgec Terhadap Profitabilitas Pada Perusahaan Perbankan Periode 2015-2019." *Dynamic Management Journal*, Vol. 6, No. 2 (2022), 110–21.

⁷⁹ Sazly, Syukron, Fera Nelfianti, and Herudini Subariyanti. "Komparasi Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas Pada PT. BCA, Tbk. dan PT. Bank BCA Syariah." *JESYA (Jurnal Ekonomi & Ekonomi Syariah)*, Vol. 5, No. 1 (2022), 115–27.

⁸⁰ Rochmah and Purnamasari, Rochmah, Nikmatul, and Puji Endah Purnamasari. "The Influence of Bank Health and Interest Rates on Bank Profitability and Moderated By Economic Growth." *Ekonomis: Journal of Economics and Business*, Vol. 7, No. 2 (2023), 1389–96.

⁸¹ Putra, Chairuddin Surya, Harlen, and Machasin. "Pengaruh Modal Fisik, Modal Finansial, dan Modal Intelektual Terhadap Kinerja Perusahaan (Studi Kasus Pada Perusahaan Food And Beverages Yang Terdaftar di Bei Tahun 2009 s.d.2013)." *Jurnal Ekonomi*, Vol. 22, No. 3 (2014), 16–32.

⁸² Diyah Ariyani, "The Margin of Islamic Microfinance Institution: To What Extent Does Capital Structure Matter," *Islamic Economics Journal*, Vol. 07, No. 2 (2021), 91–103.

⁸³ Wahyu Agung Panji Subekti and Guntur Kusuma Wardana, "Pengaruh CAR, Asset Growth, BOPO, DPK, Pembiayaan, NPF dan FDR Terhadap ROA Bank Umum Syariah," *INOBI: Jurnal Inovasi Bisnis dan Manajemen Indonesia* Vol. 5, No. 2 (2022), 270–85.

capital efficiently to generate profit.⁸⁴ This research is in line with studies conducted by Subekti & Wardana (2022)⁸⁵ and Nisak (2021)⁸⁶ which also state that Capital has a significant negative effect on profitability.

The Influence of Risk Profile on Profitability with Economic Growth as a Moderating Variable

Based on the results of the MRA test, it can be concluded that economic growth significantly moderates the adverse impact of NPF on profitability, thereby supporting the acceptance of the fifth hypothesis (H5). As illustrated in Figure 1, the influence of NPF on ROA is relatively minor. When GDP is high, the line is slightly elevated compared to others, indicating that as economic growth increases, the negative impact of NPF on ROA diminishes. Conversely, when GDP is low, an increase in NPF exerts greater pressure on bank profitability. It can be concluded that economic growth (GDP) functions as a moderating variable that mitigates the negative effect of NPF on ROA in Islamic banks. This phenomenon can be explained by the prevailing conditions in the field. During an economic slowdown, many debtors encounter difficulties in fulfilling their obligations, leading to a substantial increase in NPF, which subsequently reduces bank profitability.⁸⁷ However, when the economy is experiencing positive growth, the risk of default decreases because debtors' ability to repay is more secure⁸⁸. As a result, banks in good financial health can optimize lending activities and ultimately increase profitability. In other words, economic growth can serve as a cushion that weakens the negative impact of financing risk on the profitability of Islamic banks.⁸⁹

The growing economic conditions send a positive signal regarding debtors' repayment ability and the stability of the real sector, so the negative signals caused by high NPF can be mitigated.⁹⁰ Meanwhile, as economic growth increases, public income and business activities also improve, thereby reducing the risk of default and lessening the pressure of NPF on bank profitability⁹¹. Therefore, Islamic banks need to be cautious in disbursing financing during unfavorable economic conditions due to the high risk of default.⁹² The results of this study are in line with previous

⁸⁴ *Ibid.*

⁸⁵ *Ibid.*

⁸⁶ Nisak, Berliana Fadhilatun. Pengaruh Non Performing Loan dan Capital Adequacy Ratio Terhadap Profitabilitas dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi Pada Konvensional di BEI Tahun 2015-2019. *Universitas Islam Negeri*, 2021.

⁸⁷ *Ibid.*

⁸⁸ Rizki Fitriansyah, "Pengaruh Faktor Makroekonomi Terhadap Resiko Pembiayaan Bank Syariah," *Islamic Economics Journal* Vol. 5, No. 2 (2019), 181–96.

⁸⁹ Rahmawati, Zulfa Muasaroh Binti, Titis Miranti, and Ulfi Kartika. "Do Political Risks Influence Sharia Bank Stability? The Case of Southeast Asia." *Shirkah: Journal of Economics and Business*, Vol. 10, No. 2 (2025), 294–311.

⁹⁰ Simanjuntak and Nainggolan, "Pengaruh DPK, CAR, LDR Terhadap Kinerja Keuangan Dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi Pada Sektor Perbankan Yang Terdaftar Di Bursa Efek Indonesia Periode 2016-2020." *Management Studies and Entrepreneurship Journal*, Vol. 3, No. 2 (2022): 525–37.

⁹¹ Nisak, Berliana Fadhilatun. Pengaruh Non Performing Loan dan Capital Adequacy Ratio Terhadap Profitabilitas Dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi Pada Konvensional di BEI Tahun 2015-2019. *Universitas Islam Negeri*, 2021.

⁹² Aisyah, Lisda, Meichio Lesmana, Muhammad Sauqi, and Agus Alimuddin, "Analysis of the Effect of Gross Domestic Product and Total Population on State Tax Revenue (2016-2020)," *Islamic Economics Journal*, Vol. 08, No. 01 (2022), 71–83.

research conducted by Nisak (2021)⁹³ which states that the influence of NPF on profitability is moderated by economic growth.

The Influence of Good Corporate Governance on Profitability with Economic Growth as a Moderating Variable

Based on the results of the MRA test, it can be concluded that economic growth is not able to significantly moderate the influence between Good Corporate Governance and profitability; therefore, the seventh hypothesis (H6) is rejected. Corporate governance practices are more internal in nature and have a long-term impact, so economic fluctuations do not necessarily strengthen their relationship with profitability. Economic growth tends to affect the demand for financing and business activities, not the quality of governance that has already been established according to regulations.⁹⁴ The relatively small variation in GCG implementation among banks due to regulatory standards also makes the moderating effect of economic growth appear insignificant.

The positive signals from the implementation of GCG are not strong enough to boost market confidence when the economy is rising or falling. Investors pay more attention to real financial performance than to long-term governance.⁹⁵ Economic growth does not strengthen the influence of GCG on profitability. This indicates that corporate governance factors are not directly sensitive to macroeconomic fluctuations. Bank profitability is more affected by operational efficiency and asset quality.⁹⁶ The results of this study are in line with previous research conducted by Rochmah & Purnamasari (2023)⁹⁷ which states that GCG's effect on profitability is not moderated by economic growth.

The Influence of Earnings on Profitability with Economic Growth as a Moderating Variable

Based on the results of the MRA test, it can be concluded that economic growth is able to moderate the influence of BOPO on profitability significantly, so the ninth hypothesis (H7) is accepted. Based on Figure 2., it can be seen that all slopes are negative, which means that the higher the BOPO, the lower the ROA. In other words, an increase in operating expenses that is not matched by revenue will reduce bank profitability. In a strong economic condition, the decline in ROA due to an increase in BOPO is not too steep, while in a weak economy, the negative impact of BOPO on ROA becomes greater. When the economy is growing, business activities and public consumption also increase. In this situation, demand for banking products and services tends to rise, bank revenues increase, and financing risk decreases. As

⁹³ Nisak, Berliana Fadhilatun. Pengaruh Non Performing Loan dan Capital Adequacy Ratio Terhadap Profitabilitas Dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi Pada Konvensional di BEI Tahun 2015-2019. Universitas Islam Negeri, 2021.

⁹⁴ Putri, Devi Allisya, and Willy Sri Yuliandhari. "Pengaruh Tingkat Kesehatan Keuangan Bank Menggunakan Rgec Terhadap Pertumbuhan Laba." *Jurnal Akuntansi Bisnis dan Ekonomi*, Vol. 6, No. 1 (2020), 1569-76.

⁹⁵ Rochmah and Purnamasari, Rochmah, Nikmatul, and Puji Endah Purnamasari. "The Influence of Bank Health and Interest Rates on Bank Profitability and Moderated By Economic Growth." *Ekonomis: Journal of Economics and Business*, Vol. 7, No. 2 (2023), 96.

⁹⁶ *Ibid.*

⁹⁷ *Ibid.*

a result, even if BOPO is high, banks are still able to generate good profits.⁹⁸ On the other hand, when the economy weakens, business activities decline, and people's purchasing power decreases. In this situation, the bank's income also decreases, while operational costs remain high. This causes the negative impact of BOPO on ROA to become even stronger.⁹⁹

The operational efficiency of a bank serves as an important signal to investors and the public regarding management's performance in controlling costs and generating profits. A high BOPO ratio usually sends a negative signal because it indicates that the bank is less efficient, thus reducing its profitability. However, when macroeconomic conditions as measured by GDP are favorable or improving, a stable business environment and positive economic growth can enhance the bank's ability to optimize its revenue, even if operational costs are high.¹⁰⁰ GDP growth indicates an increase in overall economic activity, including rising demand for financing, investment, and financial transactions, which in turn improves bank asset quality and debtors' ability to meet their obligations.¹⁰¹ The results of this study are in line with previous research conducted by Setiawan, et. al., (2021)¹⁰² which states that Earnings on profitability are moderated by economic growth.

The Influence of Capital on Profitability with Economic Growth as a Moderating Variable

Based on the results of the MRA test, it can be concluded that economic growth is able to significantly moderate the influence of CAR on profitability, thus the eleventh hypothesis (H8) is accepted. Referring to figure 3., it can be concluded that the relationship between the two is influenced by macroeconomic conditions. When GDP is low to moderate, an increase in CAR is actually in line with an increase in profitability (ROA). This can be understood because, in an economy that has not yet fully recovered, strong capital sends a positive signal to the market and maintains the confidence of depositors and investors. Banks with high capital are better able to bear risks, expand financing, and maintain stability, which in turn drives profitability.¹⁰³ However, when the economy is experiencing strong growth, the pattern of this relationship changes; an increase in CAR can actually potentially reduce profitability. In this situation, banks tend to hold excess capital as

⁹⁸ Rahmawati, Zulfa Muasaroh Binti, Titis Miranti, and Ulfi Kartika. "Do Political Risks Influence Sharia Bank Stability? The Case of Southeast Asia." *Shirkah: Journal of Economics and Business*, Vol. 10, No. 2 (2025), 294–311.

⁹⁹ Nisak, Berliana Fadhilatun. Pengaruh Non Performing Loan dan Capital Adequacy Ratio Terhadap Profitabilitas dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi Pada Konvensional di BEI Tahun 2015-2019. Universitas Islam Negeri, 2021.

¹⁰⁰ Rochmah and Purnamasari, Rochmah, Nikmatul, and Puji Endah Purnamasari. "The Influence of Bank Health and Interest Rates on Bank Profitability and Moderated By Economic Growth." *Ekonomis: Journal of Economics and Business*, Vol. 7, No. 2 (2023), 96.

¹⁰¹ Moh Abdul Basir, Mulya E Siregar, and Etty Puji Lestari, "Analisis Faktor Internal dan Eksternal Bank Yang Mempengaruhi Profitabilitas Bank Umum di Indonesia," *Jurnal Ekonomi, Manajemen, Bistis Dan Sosial A*, Vol. 1, No. 2 (2021), 150–63.

¹⁰² Setiawan, Setiawan, Leni Nur Pratiwi, and Rani Putri Kusuma Dewi. "Efisiensi Operasional, Makroekonomi, dan Profitabilitas Pada Perbankan Syariah di Indonesia." *Jurnal Ilmiah Akuntansi Dan Keuangan*, Vol. 4, No. 01 (2021), 40-45.

¹⁰³ Intan Rika Yuliana and Sinta Listari, "Pengaruh CAR, FDR, Dan BOPO Terhadap ROA Pada Bank Syariah di Indonesia," *Jurnal Ilmiah Akuntansi Kesatuan*, Vol. 9, No. 2 (2021), 309–34.

a precautionary reserve, so funds that should be allocated for financing expansion or investment are not absorbed optimally. As a result, capital utilization efficiency decreases and profitability declines.¹⁰⁴

The size of the CAR serves as a signal to investors, depositors, and regulators that the bank has strong capital capacity and is able to bear risks.¹⁰⁵ When the economy is not yet stable, this signal is received positively by the market because it demonstrates the bank's resilience amid uncertainty. However, when the economy is experiencing rapid growth, a signal from an excessively high CAR is actually interpreted as the bank's suboptimal use of its capital.¹⁰⁶ Macroeconomic conditions affect a bank's ability to manage its capital. During low to moderate economic phases, strong capitalization actually helps banks maintain the sustainability of their intermediation function and stability.¹⁰⁷ The high economic phase, financing expansion opportunities become broader, so banks with excessively high CAR actually fall behind because more of their capital is secured rather than being circulated in productive activities.¹⁰⁸ The results of this study are in line with previous research conducted by Rochmah & Purnamasari (2023)¹⁰⁹ which states that the influence of capital on profitability can be moderated by economic growth.

The Influence of Risk Profile on Profitability with Economic Freedom as a Moderating Variable

Based on the results of the MRA test, it can be concluded that economic freedom is able to significantly moderate the influence between NPF and profitability, thus the sixth hypothesis (H9) is accepted. Based on figure 4, it can be concluded that economic freedom weakens the negative influence of NPF on profitability. This means that the higher the level of economic freedom, the smaller the negative impact of NPF on profitability, because a freer economic environment helps banks manage financing risks more efficiently¹¹⁰. Bank's financial performance serves as a signal to the market regarding the bank's condition and prospects. A high NPF level sends a negative signal because it indicates an increase in non-performing financing risk. However, when the level of economic freedom is high, a more open and efficient

¹⁰⁴ Subekti, Wahyu Agung Panji, and Guntur Kusuma Wardana. "Pengaruh CAR, Asset Growth, BOPO, DPK, Pembiayaan, NPF Dan FDR Terhadap ROA Bank Umum Syariah." *INO BIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, Vol. 5, No. 2 (2022), 270–85.

¹⁰⁵ Mahesa Vigo Septiasa and Mustanwir Zuhri. "Analisis Pengaruh Spesifik Bank Dan Makro Ekonomi Terhadap Profitabilitas Bank Analysis of the Specific Influence of Bank and Macroeconomics on Bank Profitability," *Jurnal Manajemen dan Perbankan*, Vol. 7, No. 2 (2020), 61–77.

¹⁰⁶ Subekti, Wahyu Agung Panji, and Guntur Kusuma Wardana. "Pengaruh CAR, Asset Growth, BOPO, DPK, Pembiayaan, NPF Dan FDR Terhadap ROA Bank Umum Syariah." *INO BIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, Vol. 5, No. 2 (2022), 270–85.

¹⁰⁷ Setiawan, Setiawan, Leni Nur Pratiwi, and Rani Putri Kusuma Dewi. "Efisiensi Operasional, Makroekonomi, Dan Profitabilitas Pada Perbankan Syariah di Indonesia." *Jurnal Ilmiah Akuntansi dan Keuangan*, Vol. 4, No. 01 (2021), 40–45.

¹⁰⁸ Usman Harun, "Pengaruh Ratio-Ratio Keuangan CAR, LDR, NIM, BOPO, NPL Terhadap ROA," *Jurnal Riset Bisnis Dan Manajemen*, Vol. 4, No. 1 (2016), 67–82.

¹⁰⁹ Rochmah and Purnamasari, Rochmah, Nikmatul, and Puji Endah Purnamasari. "The Influence of Bank Health and Interest Rates on Bank Profitability and Moderated By Economic Growth." *Ekonomis: Journal of Economics and Business*, Vol. 7, No. 2 (2023), 96.

¹¹⁰ Faisal Abbas and Shoab Ali, "Is Economic Freedom a Moderator of the Relationship Between Bank Capital and Profitability?," *Scientific Annals of Economics and Business*, Vol. 69, No. 2 (2022), 273–92.

economic environment enables banks to manage risks more effectively through financing restructuring and operational efficiency. Thus, the negative signal from rising NPF can be reduced because the market assesses that the bank is still able to maintain its financial performance.¹¹¹

Economic freedom also fosters an efficient business climate and promotes growth. This is in line with the findings of this study, which also indicate that macro factors play a significant role in mitigating the impact of problematic financing risks.¹¹² The results of this study are in line with previous research conducted by Abbas et al (2024)¹¹³ which states that credit risk to profitability can be moderated by economic freedom.

The Influence of Good Corporate Governance on Profitability with Economic Freedom as a Moderating Variable

Based on the results of the MRA test, it can be concluded that economic freedom is not able to significantly moderate the influence between Good Corporate Governance and profitability, thus the eighth hypothesis (H10) is rejected. The implementation of GCG in banks is more focused on formal compliance with regulations, so governance practices tend to be administrative in nature and do not directly increase profits, even though the economic environment supports business expansion.¹¹⁴ The benefits of economic freedom are also not always evenly distributed across the entire banking sector; some banks may face limited market access, such as Islamic banks which can only access markets that comply with Sharia principles. The profitability of banks is often more influenced by other external factors such as interest rates, inflation, and industry competition, making the role of economic freedom as a moderator less apparent.¹¹⁵

The positive signal from the implementation of good corporate governance is not sufficiently reinforced by the presence of economic freedom. This is because GCG relates to very internal company conditions, namely regarding corporate culture, internal policies, and ownership control. Therefore, macro conditions such as economic freedom cannot have a direct impact on its relationship with profitability.¹¹⁶ From a macroeconomic theoretical standpoint, economic freedom is posited to foster a favorable business environment through market liberalization, thereby enhancing profitability. Nevertheless, the present findings suggest that a more liberal macroeconomic environment does not amplify the impact of corporate governance on profitability. This implies that corporate governance is predominantly

¹¹¹ Dimitrios Asterioua, Keith Pilbeam, and Iuliana Tomuleasa, "The Impact of Corruption, Economic Freedom, Regulation and Transparency on Bank Profitability and Bank Stability: Evidence from the Eurozone Area," *Brookers Radar*, 2020.

¹¹² Abbas, Faisal, Shoaib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon*, Vol. 10, No. 16 (2024).

¹¹³ Abbas, Faisal, Shoaib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon*, Vol. 10, No. 16 (2024).

¹¹⁴ Putri, Devi Allisya, and Willy Sri Yulianthari. "Pengaruh Tingkat Kesehatan Keuangan Bank Menggunakan Rgec Terhadap Pertumbuhan Laba." *Jurnal Akuntansi Bisnis Dan Ekonomi*, Vol. 6, No. 1 (2020), 1569–76.

¹¹⁵ Lavanda, Shyaila Anisa De, and Carmel Meiden. "Pengaruh Pengungkapan Tanggung Jawab Sosial Dan Tata Kelola Perusahaan Terhadap Kinerja Keuangan." *Jurnal Akuntansi Dan Governance*, Vol. 2, No. 2 (2022), 94–109.

¹¹⁶ Abbas, Faisal, Shoaib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon*, Vol. 10, No. 16 (2024).

influenced by internal factors and regulatory adherence, rather than fluctuations in macroeconomic conditions.¹¹⁷ The results of this study are in line with previous research conducted by Abbas, et. al., (2024)¹¹⁸ which states that GCG's effect on profitability is not moderated by economic freedom.

The Influence of Earnings on Profitability with Economic Freedom as a Moderating Variable

Based on the results of the MRA test, it can be concluded that economic freedom is able to significantly moderate the influence of BOPO on profitability; therefore, the tenth hypothesis (H11) is accepted. As shown in Figure 5, the level of EF affects both the direction and strength of this relationship. Under conditions of low EF, the influence of BOPO on ROA tends to become more negative, meaning the higher the BOPO, the more sharply profitability (ROA) declines. However, when EF is at a higher level, the regression line shows a gentler slope, so the negative impact of BOPO on ROA becomes weaker. When Islamic banking regulations are still limited and bureaucracy in financial transactions is quite lengthy, high BOPO directly suppresses ROA because operational costs are difficult to reduce. This occurs when the digital banking infrastructure is still inadequate. However, when the economic climate improves, banking digitalization develops, and regulations become more supportive, the negative impact of BOPO on ROA becomes smaller.¹¹⁹ Favorable economic and financial conditions enable banks to reduce costs through technological advancements and process efficiencies. Consequently, even though the operating expense ratio (BOPO) increases, the decline in return on assets (ROA) is not as pronounced.¹²⁰

Banks operating in an economy with high economic freedom are able to send positive signals to investors and the public, for example through transparency and innovation, so even though operational costs (BOPO) are high, the impact on profitability is not too significant.¹²¹ economic freedom reflects external conditions that support market efficiency and regulatory stability. In contexts where economic freedom is elevated, the resultant market efficiency and policy support facilitate banks in minimizing operational costs, thereby mitigating the adverse effects of BOPO on ROA.¹²² The results of this study are in line with previous research conducted by

¹¹⁷ Rochmah and Purnamasari, Rochmah, Nikmatul, and Puji Endah Purnamasari. "The Influence of Bank Health and Interest Rates on Bank Profitability and Moderated By Economic Growth." *Ekonomis: Journal of Economics and Business*, Vol.7, No. 2 (2023), 96.

¹¹⁸ Abbas, Faisal, Shoib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon*, Vol. 10, No. 16 (2024).

¹¹⁹ Rahmawati, Zulfa Muasaroh Binti, Titis Miranti, and Ulfi Kartika. "Do Political Risks Influence Sharia Bank Stability? The Case of Southeast Asia." *Shirkah: Journal of Economics and Business*, Vol. 10, No. 2 (2025), 294-311.

¹²⁰ Abbas, Faisal, Shoib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon*, Vol. 10, No. 16, (2024).

¹²¹ Blaga, Florin, Bogdan Andrei Dumitrescu, Ioana Ducea, Ionel Leonida, and Dalia Poleac. "Analyzing the Determinants of Banking Profitability in European Commercial Banks: Do COVID-19 Economic Support Measures Matter?" *Sustainability (Switzerland)*, Vol. 16, No. 16 (2024).

¹²² Abbas, Faisal, Shoib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon*, Vol. 10, No. 16 (2024).

Abbas, et. al., (2024)¹²³ which states that the influence of earnings on profitability can be moderated by economic freedom.

The Influence of Capital on Profitability with Economic Freedom as a Moderating Variable

Based on the results of the MRA test, it can be concluded that economic freedom is able to significantly moderate the influence of CAR on profitability, thus the twelfth hypothesis (H12) is accepted. Based on Figure 6, it can be seen that all regression lines have a positive slope, which means that an increase in CAR tends to increase ROA, although the strength varies at each level of EF. In real conditions, the role of EF can be observed in how the economic environment influences a bank's capital management choices. When EF is high, the market is more open, regulations are clearer, financial and digital infrastructure is better, and banks can more easily channel capital into productive financing, so that a high CAR can be used productively and drive ROA. Investors and depositors also have greater confidence, resulting in lower funding costs and increased margins.¹²⁴ On the other hand, when EF is low, heavy bureaucracy, limited markets, protectionism, and inadequate infrastructure lead banks to hold capital in safe instruments because the risk of lending is high.¹²⁵

High capital signals confidence and bank resilience, which increases profitability, as strong capital is needed to maintain stability when economic freedom is limited.¹²⁶ An open economy facilitates greater opportunities for expansion, enabling a high CAR to be utilized effectively, thereby enhancing profitability. The results of this study are in line with previous research conducted by Abbas, et. al., (2024)¹²⁷ and Abbas & Ali (2022)¹²⁸ which states that the influence of capital on profitability can be moderated by economic freedom.

Conclusion

Based on the results of the regression analysis, it was found that the variables NPF, BOPO, and CAR have a significant effect on profitability, while GCG does not have a significant effect on profitability. In addition, the results of the interaction of the moderating variables show that economic growth is able to moderate the influence of NPF, BOPO, and CAR on profitability, but cannot moderate the influence of GCG. Likewise, the economic freedom variable can also moderate the effect of NPF, BOPO, and CAR on profitability, but cannot moderate the effect of GCG. It

¹²³ Ibid.

¹²⁴ Setiawan, Setiawan, Leni Nur Pratiwi, and Rani Putri Kusuma Dewi. "Efisiensi Operasional, Makroekonomi, dan Profitabilitas Pada Perbankan Syariah Di Indonesia." *Jurnal Ilmiah Akuntansi dan Keuangan*, Vol. 4, No. 1 (2021), 40–45.

¹²⁵ Harun, Usman. "Pengaruh Ratio-Ratio Keuangan CAR, LDR, NIM, BOPO, NPL Terhadap ROA." *Jurnal Riset Bisnis Dan Manajemen*, Vol. 4, No. 1 (2016), 67–82.

¹²⁶ Setiawan, Setiawan, Leni Nur Pratiwi, and Rani Putri Kusuma Dewi. "Efisiensi Operasional, Makroekonomi, Dan Profitabilitas Pada Perbankan Syariah Di Indonesia." *Jurnal Ilmiah Akuntansi Dan Keuangan*, Vol. 4, No. 01 (2021), 40–45.

¹²⁷ Abbas, Faisal, Shoab Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon*, Vol. 10, No. 16 (2024).

¹²⁸ Abbas, Faisal, and Shoab Ali. "Is Economic Freedom a Moderator of the Relationship Between Bank Capital and Profitability?" *Scientific Annals of Economics and Business*, Vol. 69, No. 2, (2022), 273–292.

can be concluded that the factors NPF, BOPO, and CAR influence profitability both directly and through moderation. Meanwhile, GCG does not show a significant effect either directly or when moderated.

The results of this study provide important implications for banking management to be more prudent in maintaining a balance between the level of capital adequacy (CAR) and financing efficiency. Excessive capital without productive utilization can reduce profitability, therefore an adaptive capital management strategy that responds to macroeconomic conditions is necessary. In addition, banks need to improve the quality of financing analysis, strengthen customer monitoring, and reduce operational costs through digitalization and increased human resource productivity. This study has some limitations, including the fact that it only uses data from Islamic banking in Indonesia, so the results cannot yet be generalized to cross-country contexts or compared with conventional banks.

References

- Abbas, Faisal, and Shoaib Ali. "Is Economic Freedom a Moderator of the Relationship Between Bank Capital and Profitability?" *Scientific Annals of Economics and Business*, Vol. 69, No. 2, (2022), 273–292. <https://doi.org/10.47743/saeb-2022-0016>.
- Abbas, Faisal, Shoaib Ali, Kai Yin Woo, and Wing Keung Wong. "Capital and Profitability: The Moderating Role of Economic Freedom." *Heliyon*, Vol. 10, No. 16 (2024). <https://doi.org/10.1016/j.heliyon.2024.e35253>.
- Ady, Rony Arpinto. "Pengaruh Makroekonomi Terhadap Profitabilitas Perbankan di Indonesia." *Research Fair Unisri*, Vol. 4, No. 1 (2020), 115–26. <https://doi.org/10.33061/rsfu.v4i1.3393>.
- Agusto, Agosto Hasiholan Rafried Sihite. "Pengaruh Capital Adequacy Ratio (CAR) dan Financing To Deposit Ratio (FDR) Terhadap Profitabilitas Bank Umum Syariah di Indonesia." *Maro: Jurnal Ekonomi Syariah dan Bisnis*, Vol. 4, No. 2 (2021), 1–8. <https://doi.org/10.31949/maro.v4i2.1189>.
- Ahmad, Haseeb, Junaid Sadeeqe, Umar Farooq, Umar Hayat, and Uzma Haroon. "Fiscal Policy Determinants Impact on the Economic Growth With the Moderating Role of the Exchange Rate and Inflation Rate: Evidence From an Emerging Economy." *Journal of Excellence in Management Sciences*, Vol. 3, No. 3 (2024), 68–81.
- Aini, Ratri Zhohratun, and Rusdianto. "Analysis of Factors Affecting Profitability of Islamic Banks in Yogyakarta." *Islamic Economics Journal*, Vol. 10, No. 02 (2024), 103–115. <https://doi.org/https://dx.doi.org/10.21111/iej.v10i2.12240>.
- Aisyah, Lida, Meichio Lesmana, Muhammad Sauqi, and Agus Alimuddin. "Analysis of the Effect of Gross Domestic Product and Total Population on State Tax Revenue (2016-2020)." *Islamic Economics Journal*, Vol. 08, No. 01 (2022), 71–83. <https://doi.org/http://dx.doi.org/10.21111/iej.v8i1.7503>. Analysis.
- Akbar, Reza, U. Sulia Sukmawati, and Khairul Katsirin. "Analisis Data Penelitian Kuantitatif." *Jurnal Pelita Nusantara*, Vol. 1, No. 3 (2024), 430–48. <https://doi.org/10.59996/jurnalpelitanusantara.v1i3.350>.

- Alaamsah, Raden Hario Daffa, Fitri Yetti, Prima Dwi Priyatno. "Pengaruh NPF, CAR, dan FDR Terhadap Profitabilitas Bank Umum Syariah di Indonesia." *EL-IQTHISHOD*, Vol. 5, No. 2 (2021), 19–46.
- Amin, Nur Fadilah, Sabaruddin Garancang, and Kamaluddin Abunawas. "Konsep Umum Populasi Dan Sampel Dalam Penelitian." *Jurnal Pilar: Jurnal Kajian Islam Kontemporer*, Vol. 14, No. 1 (2023): 15–31. <https://www.ojsstikesbanyuwangi.com/index.php/PHJ/article/view/283>.
- Anam, Hairul, Hendika SL, and Bani Anhar. "Tingkat Kesehatan Bank dengan Metode RGEC." *Jurnal Geo Ekonomi*, Vol. 13, No. 1 (2022), 116–127. <https://doi.org/10.36277/geoekonomi.v13i1.150>.
- Ariyani, Diyah. "The Margin of Islamic Microfinance Institution: To What Extent Does Capital Structure Matter." *Islamic Economics Journal*, Vol. 7, No. 2 (2021), 91–103. <https://doi.org/http://dx.doi.org/10.21111/iej.v7i2.6891>.
- Aryani, Sania Nisa, and Iwan Setiawan. "Analisis Pengaruh Risk Profile Terhadap Profitabilitas Unit Usaha Syariah Pada Tahun 2015-2023." *Journal of Applied Islamic Economics and Finance*, Vol. 4, No. 3 (2024), 463–74.
- Asterioua, Dimitrios, Keith Pilbeam, and Iuliana Tomuleasa. "The Impact of Corruption, Economic Freedom, Regulation and Transparency on Bank Profitability and Bank Stability: Evidence from the Eurozone Area." *Brookers Radar*, 2020.
- Aurelia, Adisa, and David Efendi. "Pengaruh Efisiensi Operasional, Kredit Bermasalah, dan Rasio Kecukupan Modal pada Perbankan di Jawa Timur Periode 2016-2021." *Jurnal Ilmu dan Riset Akuntansi*, Vol. 12, No. 12 (2023), 1–18.
- Basir, Moh Abdul, Mulya ESiregar, and Etty Puji Lestari. "Analisis Faktor Internal dan Eksternal Bank yang Mempengaruhi Profitabilitas Bank Umum di Indonesia." *Jurnal Ekonomi, Manajemen, Bisnis dan Sosial A*, Vol. 1, No. 2 (2021), 150–163. <https://embiss.com/index.php/embiss>.
- Beriwisnu, Tri Cahyo, and Maswar Patuh Priyadi. "Pengaruh Pertumbuhan Ekonomi, Industri dan Kinerja Keuangan Terhadap Nilai Perusahaan." *Jurnal Ilmu dan Riset Akuntansi*, Vol. 6, No. 12 (2018), 2–14.
- Bлага, Florin, Bogdan Andrei Dumitrescu, Ioana Duca, Ionel Leonida, and Dalia Poleac. "Analyzing the Determinants of Banking Profitability in European Commercial Banks: Do Covid-19 Economic Support Measures Matter?" *Sustainability (Switzerland)*, Vol. 16, No. 16 (2024). <https://doi.org/10.3390/su16167004>.
- Dawaba, Ashraf Mohamed, and Abdalrahman Migdad. "Islamic Banks between the Jurisprudence of Leading Theorists and Application." *Islamic Economics Journal*, Vol. 08, No. 01 (2022), 34–56. <https://doi.org/http://dx.doi.org/10.21111/iej.v8il.7936>.
- Endratmoko. "Good Corporate Governance (GCG) on Pt. Bank Rakyat Indonesia (Persero) Tbk." *Dijemss*, Vol. 1, No. 5 (2020): 638–648. <https://doi.org/10.31933/DIJEMSS>.
- Fajari, Slamet, and Sunarto. "Pengaruh CAR, LDR, NPL, BOPO Terhadap Profitabilitas Bank (Studi Kasus Perusahaan Perbankan yang Tercatat di Bursa Efek Indonesia Periode Tahun 2011 Sampai 2015)." *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers UNISBANK Ke-3*, No. 3 (2017), 853–862.

- Firdaus, Rafli Faisal, and Ersi Sisdiyanto. "Profitability Ratio Analysis As an Assessment of The Financial Performance of Indonesian Sharia Banks: Case Study Report For 2022-2023." *JIIIC: Jurnal Intelek Insan Cendikia*, Vol. 1, No. 10 (2024), 7384–7391.
- Fitriansyah, Rizki. "Pengaruh Faktor Makroekonomi Terhadap Resiko Pembiayaan Bank Syariah." *Islamic Economics Journal*, Vol. 5, No. 2 (2019), 181–196. <https://doi.org/http://dx.doi.org/10.21111/iej.v5i2.3810>.
- Foundation, Heritage. "Economic Freedom Country Profile Indonesia." Heritage.org, 2025. <https://www.heritage.org/index/pages/country-pages/indonesia>.
- Gandrud, Christopher. *Reproducible Research with R and RStudio*. Second Edi. London: CPC Press Taylor & Francis Group, 2015.
- Ghozali, Imam. *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 Edisi 9*. Edited by Abadi Tejokusumo. 9th ed. Semarang: Badan Penerbit Universitas Diponegoro, 2018.
- Harini, Ayunseh Retno, Mahrus Lutfi Adi Kurniawan, and Budi Jaya Putra. "Do Macroeconomic Variables Affect Deposits in Shariah Banks ?" *Islamic Economics Journal*, Vol. 10, No. 1 (2024): 61–71. <https://doi.org/http://dx.doi.org/10.21111/iej.v10i1.11611>.
- Harun, Usman. "Pengaruh Ratio-Ratio Keuangan CAR, LDR, NIM, BOPO, NPL Terhadap ROA." *Jurnal Riset Bisnis Dan Manajemen*, Vol. 4, No. 1 (2016), 67–82.
- Hendrayanti, Silvia, Wachidah Fauziyanti, and Eni Puji Estuti. "Dampak Faktor Internal dan Eksternal Terhadap Profitabilitas Perbankan (Studi pada Bank Konvensional di Indonesia Periode Januari 2012 - Januari 2019)." *Jurnal STIE Semarang*, Vol. 11, No. 3 (2019), 5–24.
- Huda, Miftahul, Azidni Rofiqo, Abdurriszqi Bin Abdul Razak, and Fikriyyatun Nabila. "The Effect of Macroeconomic Variables on the Profitability of Islamic Commercial Banks in Indonesia." *Islamic Economics Journal*, Vol. 3, No. 1 (2024), 135–149. <https://doi.org/https://dx.doi.org/10.21111/iej.v10i2.11759>.
- Hung, Nguyen Tan, Tran Thi Kim Oanh, and Chu Thi Thanh Trang. "The Impact of Economic Freedom on Economic Growth in Countries with High and Low Regulatory Quality – Lessons for Viet Nam." *Humanities and Social Sciences Communications*, Vol. 11, No. 1 (2024). <https://doi.org/10.1057/s41599-024-03741-8>.
- Ikatan bankir indonesia (IBI). *Pedoman dan Strategi Audit Intern Bank*. Edited by Fajarianto; Isran Febrianto. Jakarta pusat: PT. Gramedia Pustaka Utama, 2020.
- Kim, Anthony B. "The Index of Economic Freedom." The Heritage Foundation, 2025. <https://www.heritage.org/index/pages/about>.
- Kurniawan, Zulfa Ahmad. "Comparison of Islamic Commercial Banks and Islamic Business Units : Which Is More Efficient ?" *Islamic Economics Journal*, Vol. 11, No. 01 (2025), 61–76. <https://doi.org/https://dx.doi.org/10.21111/iej.v11i1.12876>.
- Kusnanto, Amir. "Risk Profile, Good Corporate Governance, Earning, Capital (RGEC) Method Sebagai Instrumen Pengukur Tingkat Kesehatan Perbankan Syariah di Indonesia." *Jurnal Administrasi Bisnis*, Vol. 6, No. 2 (2018): 124-136. <https://doi.org/10.14710/jab.v6i2.16614>.
- Lavanda, Shyaila Anisa De, and Carmel Meiden. "Pengaruh Pengungkapan Tanggung Jawab Sosial dan Tata Kelola Perusahaan Terhadap Kinerja Keuangan." *Jurnal*

- Akuntansi dan Governance*, Vol. 2, No. 2 (2022): 94-109. <https://doi.org/10.24853/jago.2.2.94-109>.
- Lubis, Rukiah, Wanda Khairun Nasirin, and Ananda Anugrah Nasution. "The Relationship between Foreign Direct Investment, Islamic Financial Performance and Economic Growth with Economic Freedom as Moderating Variable." *International Journal of Islamic Business and Economics (IJIBEC)*, Vol. 7, No. 1 (2023): 49–63. <https://doi.org/10.28918/ijibec.v7i1.6920>.
- Maharani, Ninis Salsabila, and Yudha Trishananto. "Pengaruh NPF dan FDR Terhadap ROA dengan CAR Sebagai Variabel Intervening Pada Bank Umum Syariah di Indonesia Tahun 2019-2023." *Jurnal Keuangan Dan Perbankan*, Vol. 21, No. 2 (2025), 113–122.
- Meini, Zumratul, and Sylvia Veronica Siregar. "The Effect of Accrual Earnings Management and Real Earnings Management on Earnings Persistence and Cost of Equity." *Journal of Economics, Business, and Accountancy | Ventura*, Vol. 17, No. 2 (2014), 269-280. <https://doi.org/10.14414/jebav.v17i2.309>.
- Nisak, Berliana Fadhilatun. *Pengaruh Non Performing Loan dan Capital Adequacy Ratio Terhadap Profitabilitas dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi Pada Konvensional di BEI Tahun 2015-2019*. Universitas Islam Negeri, 2021.
- Nurchahya, Wilma Arum, Nadia Prasista Arisanti, and Audrey Nabilla Hanandhika. "Penerapan Uji Asumsi Klasik Untuk Mendeteksi Kesalahan Pada Data Sebagai Upaya Menghindari Pelanggaran Pada Asumsi Klasik." *Madani: Jurnal Ilmiah Multidisiplin*, Vol. 1, No. 12 (2023), 472–481.
- Oktaviana, Ulfi Kartika, Tiara Juliana Jaya, and Titis Miranti. "The Role of Islamic Social Reporting, Islamic Corporate Governance and Maqashid Syariah Index on Firm Value with Firm Size as Moderation Variable." *Proceedings of the International Conference on Engineering, Technology and Social Science (Iconets 2020)*, Vol. 529 (2021), 195–201. <https://doi.org/10.2991/assehr.k.210421.028>.
- Otoritas Jasa Keuangan. "Roadmap Pengembangan Perbankan Syariah Indonesia," 2020.
- Paniagua, Pablo. "Complexity Defying Macroeconomics." *Cambridge Journal of Economics*, Vol. 47, No. 3 (2023), 575–592. <https://doi.org/10.1093/cje/bead002>.
- Putra, Chairuddin Surya, Harlen, and Machasin. "Pengaruh Modal Fisik, Modal Finansial, dan Modal Intelektual Terhadap Kinerja Perusahaan (Studi Kasus Pada Perusahaan Food and Beverages yang Terdaftar di BEI Tahun 2009 s.d 2013)." *Jurnal Ekonomi*, Vol. 22, No. 3 (2014): 16–32.
- Putri, Devi Allisya, and Willy Sri Yuliandhari. "Pengaruh Tingkat Kesehatan Keuangan Bank Menggunakan RGEC Terhadap Pertumbuhan Laba." *Jurnal Akuntansi Bisnis dan Ekonomi*, Vol. 6, No. 1 (2020), 1569–1576. <https://doi.org/10.33197/jabe.vol6.iss1.2020.467>.
- Putri, Filda Felisa, Dahruji Dahruji, and Taufiqur Rahman. "Prediksi Rasio Profitabilitas Bank Umum Syariah Yang Terdaftar ISSI : Pendekatan Tren Kuadrat." *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, Vol. 6, no. 2 (2024): 58–66. <https://doi.org/10.47065/ekuitas.v6i2.6066>.
- Rachmadani, Andana Prawitra, Riko Setya Wijaya, and Arief Bachtiar. "Faktor-Faktor Internal dan Eksternal yang Mempengaruhi Profitabilitas Bank Syariah

- di Indonesia Periode 2009-2019." *Syntax Literate: Jurnal Ilmiah Indonesia*, Vol. 6, No. 2 (2021), 1053–1079. <https://doi.org/https://doi.org/10.36418/syntax-literate.v6i2.4967>.
- Rahmawati, Zulfa Muasaroh Binti, Titis Miranti, and Ulfi Kartika. "Shirkah : Journal of Economics and Business Do Political Risks Influence Sharia Bank Stability ? The Case of Southeast Asia." *Shirkah: Journal of Economics and Business*, Vol. 10, No. 2 (2025), 294–311.
- Rahmi, Nurul, and Ratna Anggraini. "Pengaruh CAR, BOPO, NPF, dan CSR Disclosure Terhadap Profitabilitas Perbankan Syariah." *Jurnal Ilmiah Wahana Akuntansi*, Vol. 8, No. 2 (2013): 171–187. <http://journal.unj.ac.id/unj/index.php/wahana-akuntansi/article/view/861>.
- Ratnasari, Evy. "Upaya Peningkatan Profitabilitas Usaha." *FOKUS : Publikasi Ilmiah untuk Mahasiswa, Staf Pengajar dan Alumni Universitas Kapuas Sintang*, Vol. 18, No. 1 (2020), 25–34. <https://doi.org/10.51826/fokus.v18i1.393>.
- Rezeki, Indah Harum, and Heni Noviarita. "Analisis Rasio Kinerja Keuangan Bank Muamalat Indonesia Pada Masa Pandemi." *Islamic Economics Journal*, Vol. 07, No. 01 (2021), 64–75. <https://doi.org/ttp://dx.doi.org/10.21111/iej.v7i1.6498>.
- Rochmah, Nikmatul, and Puji Endah Purnamasari. "The Influence of Bank Health and Interest Rates on Bank Profitability and Moderated By Economic Growth." *Ekonomis: Journal of Economics and Business*, Vol. 7, No. 2 (2023): 1389–1396. <https://doi.org/10.33087/ekonomis.v7i2.1125>.
- Rohmah, Irma Nur, and M Nasir. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas dengan Menggunakan Metode RGEC Pada Bank Pemerintah dan Bank Swasta yang Terdaftar di BEI Periode 2017-2021." *Innovative*, Vol. 3, No. 5 (2023), 5238–5253. <https://j-innovative.org/index.php/Innovative/article/view/5364/3860>.
- Safira, Wahyu Izza, and Esy N. "Analisis Tingkat Kesehatan Bank Syariah Serta Dampaknya Terhadap Nilai Perusahaan Analysing the Health of Islamic Banks and Its Impact on Firm Value." *Jurnal Perbankan Syariah*, Vol. 10, No. 1 (2024), 85-93.
- Sarra, Hustna Dara, Mikrad Mikrad, and Sunanto Sunanto. "Analisis Pengaruh Tingkat Kesehatan Bank Menggunakan Metode RGEC Terhadap Profitabilitas Pada Perusahaan Perbankan Periode 2015-2019." *Dynamic Management Journal*, Vol. 6, No. 2 (2022), 110–121. <https://doi.org/10.31000/dmj.v6i2.6763>.
- Sasana, Hadi, Deni Ramdani, and Ivo Novitaningtyas. "An Empirical Analysis of The Impact of Islamic Banking on Real Output in Indonesia." *Economica: Jurnal Ekonomi Islam*, Vol. 11, No. 2 (2020), 329–45. <https://doi.org/10.21580/economica.2020.11.2.4079>.
- Sazly, Syukron, Fera Nelfianti, and Herudini Subariyanti. "Komparasi Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas Pada PT.Bank BCA,Tbk. dan PT.Bank BCA Syariah." *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, Vol. 5, No. 1 (2022): 115–27. <https://doi.org/10.36778/jesya.v5i1.578>.
- Septiasa, Mahesa Vigo, and Mustanwir Zuhri. "Analisis Pengaruh Spesifik Bank dan Makro Ekonomi terhadap Profitabilitas Bank Analysis of the Specific Influence

- of Bank And Macroeconomics on Bank Profitability." *Jurnal Manajemen dan Perbankan*, Vol. 7, No. 2 (2020), 61–77.
- Setiawan, Setiawan, Leni Nur Pratiwi, and Rani Putri Kusuma Dewi. "Efisiensi Operasional, Makroekonomi, Dan Profitabilitas Pada Perbankan Syariah Di Indonesia." *Jurnal Ilmiah Akuntansi dan Keuangan*, Vol.4, No. 1 (2021), 40–45.
- Setiawati, Erma, Alifah Sekarningrum, and Banu Witono. "Analysis of CSR Disclosure, Earnings Persistency, Earnings Growth, and Business Size on Earnings Management with Institutional Ownership as a Moderating Variable (Case Study on LQ45 Companies Listed on the Indonesia Stock Exchange (IDX) 2016-2020)." *Riset Akuntansi Dan Keuangan Indonesia*, Vol. 7, No. 2 (2023): 227–243. <https://doi.org/10.23917/reaksi.v7i2.21369>.
- Sihombing, Pardomuan Robinson. "Analisis Regresi Data Panel." In *Statistik Multivariat Dalam Riset*, 95–111. Penerbit Wirdina, 2021.
- Simanjuntak, Marihot, and Benny Rojeston Marnaek Nainggolan. "Pengaruh DPK, CAR, LDR Terhadap Kinerja Keuangan Dengan Pertumbuhan Ekonomi Sebagai Variabel Moderasi Pada Sektor Perbankan yang Terdaftar di Bursa Efek Indonesia Periode 2016-2020." *Management Studies and Entrepreneurship Journal*, Vol. 3, No. 2 (2022), 525–537. <http://journal.yrpiiku.com/index.php/msej>.
- Spence, Michael. "Job Market Signaling." *The Quarterly Journal of Economics*, Vol. 87, No. 3 (1973): 355–374. <https://www.jstor.org/stable/1882010>.
- Subangkit, Joko, Baiq Ratna Mulhimmah, Muh. Azkar, and Titik Husnawati Amini. "Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Profitabilitas (Studi Kasus Pada Bank NTB Syariah Tahun 2020-2022)." *JPEK (Jurnal Pendidikan Ekonomi Dan Kewirausahaan)*, Vol.8, No. 2 (2024): 840–849. <https://doi.org/10.29408/jpek.v8i2.25282>.
- Subanti, Sri, and Nabila Tri Amanda. "Analysis Of Unemployed Youth In Indonesia By Panel Data Regression With Moderating Variable." *Journar of the Indonesian Mathematical Society*, Vol. 30, No. 03 (2024): 338–351. <https://doi.org/10.22342/jims.30.3.1803.338-351>.
- Subekti, Wahyu Agung Panji, and Guntur Kusuma Wardana. "Pengaruh CAR, Asset Growth, BOPO, DPK, Pembiayaan, NPF Dan FDR Terhadap ROA Bank Umum Syariah." *INOBI: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, Vol. 5, No. 2 (2022), 270–285. <https://doi.org/10.31842/jurnalinobis.v5i2.229>.
- Suparyati, Agustina. "Dampak Kebebasan Ekonomi Terhadap Pertumbuhan Ekonomi." *Media Ekonomi*, Vol. 22, No. 3 (2014): 221–240. <https://doi.org/10.25105/me.v22i3.3204>.
- Tuzzuhro, Fatimah, Noni Rozaini, and Muhamad Yusuf. "Perkembangan Perbankan Syariah Diindonesia Fatimah." *PeKA: Jurnal Pendidikan Ekonomi Akuntansi*, Vol. 11, No. 2 (2023), 78–87.
- Wandhini, Ayu, and Melia Kusuma. "Pengaruh Manajemen Risiko Terhadap Kinerja Keuangan Bank Umum Syariah Periode 2019-2023." *Jurnal Perbankan Syariah*, Vol. 10, No. 2 (2024), 199–209.
- Widyastuti, Pricilla Febryanti, and Nur Aini. "Pengaruh CAR, NPL, LDR Terhadap Profitabilitas Bank (ROA) Tahun 2017-2019." *Jurnal Ilmiah Mahasiswa Akuntansi Universitas Pendidikan Ganesha*, Vol. 12, No. 03 (2021): 2614–1930.

- Widyowati, Lestari Adhi, Inta Hartaningtyas Rani, and Jara Hardiyanti Jalih. "Pengaruh Mekanisme Good Corporate Governance (GCG) Terhadap Nilai Perusahaan dengan Manajemen Laba Sebagai Variabel Intervening Pada Perusahaan Otomotif yang Terdaftar di BEI 2015-2018." *Jurnal Riset Akuntansi Dan Manajemen*, Vol. 9, No. 2 (2020), 175–183.
- Wulandari, Erna May, and Maya Indriastuti. "Digital Transformation in the Economic Growth of Indonesian Sharia Bank Services." *Islamic Economics Journal*, Vol. 9, No. 2 (2023), 39–54. <https://doi.org/http://dx.doi.org/10.21111/iej.v9i2.11171> Digital.
- Yuliana, Intan Rika, and Sinta Listari. "Pengaruh CAR, FDR, dan BOPO Terhadap ROA Pada Bank Syariah di Indonesia." *Jurnal Ilmiah Akuntansi Kesatuan*, Vol. 9, No. 2 (August 22, 2021), 309–334. <https://doi.org/10.37641/jiakes.v9i2.870>.
- Zahra, Vania Aghani Hanin, and Nafis Irkhani. "Analisis Pengaruh Mekanisme Good Corporate Governance, Financing To Deposit Ratio, dan Ukuran Perusahaan Terhadap Profitabilitas Dengan Corporate Social Responsibility Sebagai Variabel Moderasi Pada Perbankan Syariah di Indonesia Periode 2015-2019." *Nisbah: Jurnal Perbankan Syariah*, Vol. 7, No. 1 (2021), 23–30. <https://doi.org/10.30997/jn.v7i1.4245>.
- Zuhroh, Idah. "Profitabilitas Bank Syariah di Indonesia: Bagaimana Pengaruh Permodalan, Inflasi dan BI Rate?" *Jurnal Reviu Akuntansi dan Keuangan*, Vol. 12, No. 2 (2022), 398–415. <https://doi.org/10.22219/jrak.v12i2.21931>.