

## BAB V

### PENUTUP

#### 5. 1 Kesimpulan

Berdasarkan hasil penelitian yang telah dilakukan dengan melakukan uji regresi pengaruh *green banking* terhadap *bank performance*, didapatkan hasil bahwa *green bond*, jumlah unit ATM, dan jumlah pengguna *mobile banking* tidak mempengaruhi *Non-Performing Loan* (NPL).

#### 5. 2 Implikasi Manajerial

Perbankan dapat menerapkan *green banking* secara maksimal melalui upaya memaksimalkan layanan yang diberikan kepada nasabah dan secara konsisten melakukan program berkelanjutan agar dapat memberikan dampak positif bagi *bank performance* di masa mendatang.

#### 5. 3 Keterbatasan Penelitian

Dalam penelitian ini terdapat beberapa keterbatasan, yaitu:

- a. Sampel penelitian terbatas, penelitian ini hanya meneliti bank yang tergabung dalam KBMI IV.

- b. Bank performance dinilai hanya menggunakan rasio *Non-Performing Loan*.

#### 5. 4 Saran

Saran yang dapat diberikan untuk penelitian kedepannya adalah:

- a) Memastikan bank yang akan diteliti sudah menerapkan *green banking*, seperti menerbitkan *green bond* serta menggunakan aplikasi untuk transaksi online.
- b) Menggunakan data dalam jangka waktu yang lebih panjang, contohnya data 10 tahun terakhir.
- c) Menganalisis penerapan *green banking* pada bank yang termasuk dalam Kelompok Bank dengan Modal Inti III.
- d) Menggunakan rasio keuangan lainnya untuk mencerminkan *bank performance*

## DAFTAR PUSTAKA

- Abdelaziz, H., Rim, B., & Helmi, H. (2022). The Interactional Relationships Between Credit Risk, Liquidity Risk and Bank Profitability in MENA Region. *Global Business Review*, 23(3), 561–583.  
<https://doi.org/10.1177/0972150919879304>
- Adhitya, F., Farida, D. N., & Andestri, F. (2022). *Green banking: Trend Menjaga Sustainabilitas Bisnis Berwawasan Lingkungan*. Penerbit Qiara Media.
- Agustina, D., Harymawan, I., Permatasari, Y., & Haryanto, S. D. (2023). *Sustainability - Konsep dan Pelaporan*. Airlangga University Press.
- Alam, S. M. S., Chowdhury, M. A. M., & Razak, D. B. A. (2021). Research evolution in banking performance: a bibliometric analysis. *Future Business Journal*, 7(1). <https://doi.org/10.1186/s43093-021-00111-7>
- Anggito, A., & Setiawan, J. (2018). *Metodologi penelitian kualitatif*. Jejak Publisher.
- Aslam, W., & Jawaid, S. T. (2023). Green banking adoption practices: improving environmental, financial, and operational performance. *International Journal of Ethics and Systems*, 39(4), 820–840. <https://doi.org/10.1108/IJOES-06-2022-0125>
- Awaluddin, M. R., Haliah, & Kusumawati, A. (2023). The Effects of Non Performing Loan and Loan to Deposit Ratio toward Return on Asseet. *International Journal Of Humanities Education And Social Sciences (IJHES)*, 2(6), 2164–2168.
- Ayuningtyas, M., & Sufina, L. (2021). *Pengaruh Penggunaan Mobile banking, Internet Banking, dan Atm terhadap Kinerja Keuangan Perbankan*. [www.ojk.go.id](http://www.ojk.go.id)
- Azzabi, A., & Lahrichi, Y. (2023). Bank performance Determinants State of the Arts and Future Research Avenues. *New Challenges in Accounting and Finance*, 9, 26–41.
- Bank Indonesia. (n.d.). *Net Performing Loan*. Retrieved March 26, 2024, from [https://www.bi.go.id/statistik/metadata/SSKI/Documents/15\\_Metadata%20Indikator%20Sektor%20Rumah%20Tangga\\_rev.pdf](https://www.bi.go.id/statistik/metadata/SSKI/Documents/15_Metadata%20Indikator%20Sektor%20Rumah%20Tangga_rev.pdf)
- Bank Indonesia. (2012a). *Pemberian Kredit atau Pembiayaan oleh Bank Umum dan Bantuan Teknis dalam Rangka Pengembangan Usaha Mikro, Kecil, dan Menengah*.

- Bank Indonesia. (2012b). *Penilaian Kualitas Aset* .
- Barua, S. (2021). *Principles of Green banking*. De Gruyter.
- Boussaada, R., Hakimi, A., & Karmani, M. (2022). Is there a threshold effect in the liquidity risk–*Non-Performing Loans* relationship? A PSTR approach for MENA banks. *International Journal of Finance and Economics*, 27(2), 1886–1898. <https://doi.org/10.1002/ijfe.2248>
- Boussaada, R., Hakimi, A., & Karmani, M. (2023). *Non-Performing Loans and bank performance*: what role does corporate social responsibility play? A system GMM analysis for European banks. *Journal of Applied Accounting Research*, 24(5), 859–888. <https://doi.org/10.1108/JAAR-10-2021-0283>
- Burhanudin, B., Ronny, R., & Sihotang, E. T. (2019). Connecting Intention to use Online Banking, Commitment to Environmental Sustainability, and Happiness: The role of nature relatedness. *Procedia Computer Science*, 161, 341–349. <https://doi.org/10.1016/j.procs.2019.11.132>
- Cao, J. (2017). Trading Contract and Its Regulation. *Journal of Chongqing University(SocialScience Edition)*, 23, 84–90.
- Choudhry, M. (2023). *The Principles of Banking* (Vol. 2). John Wiley & Sons Singapore Pte. Ltd.
- Coalition for Green Capital. (n.d.). *What is a Green Bank*.
- Corporate Finance Institute Team. (n.d.-a). *Mobile banking*. Corporate Finance Institute.
- Corporate Finance Institute Team. (n.d.-b). *Non-Performing Loan (NPL)*. Corporate Finance Institute.
- Cui, Y., Geobey, S., Weber, O., & Lin, H. (2018). The Impact of Green Lending on Credit Risk in China. *Sustainability*, 10(6).
- Fata, F. A., & Arifin, Z. (2024). The impact of green credit distribution on *bank performance* and influencing factors. *International Journal of Research in Business and Social Science* (2147- 4478), 13(1), 323–332. <https://doi.org/10.20525/ijrbs.v13i1.3185>
- Fedrigo-Fazio, D., Ten Brink, P., Bassi, S., Emond, J., & Lucas, T. (2012). *Green Economy WHAT DO WE MEAN BY GREEN ECONOMY?* www.unep.
- Green Policy Platform. (n.d.). *Green banking: Enhancing Banking Role To Support Sustainability Development*.

- Hajer, C., & Anis, J. (2018). Analysis of the Impact of Governance on *Bank performance*: Case of Commercial Tunisian Banks. *Journal of the Knowledge Economy*, 9, 871–895.
- Harvard Business School. (2020). *The Triple Bottom Line: What It Is & Why It's Important*. <https://online.hbs.edu/blog/post/what-is-the-triple-bottom-line>
- Hasanah, N., Hariyono, S., Sunan, U., & Yogyakarta, K. (2022). Analisis Implementasi Green Financing Dan Kinerja Keuangan Terhadap Profitabilitas Perbankan Umum Di Indonesia. In *BISNIS & MANAJEMEN* (Vol. 12, Issue 1). <http://ejournal.stiemj.ac.id/index.php/ekobis>
- Hidayat, A. A. (2021). *Cara Mudah Menghitung Besar Sampel*. Geger Sunten.
- Indonesian Initiative For Sustainable Mining. (2017). *History and Concept of Sustainable Development as a Social Goal and Basic Principles of Sustainable Development*.
- Indriastuti, A., & Muharam, H. (2020). *Bank performance* in Profitability Dimensions: What External Factors and Why Does It Affect? *International Conference of Banking, Accounting, Management and Economics*, 169.
- International Capital Martket Association. (2021). *Green bond Principles*.
- Ismail. (2018). *Manajemen Perbankan*. Kencana.
- Jahan, N., & Shahria, G. (2021). Factors Effecting Customer Satisfaction of *Mobile banking* in Bangladesh: a Study on Young Users' Perspective. *South Asian Journal of Marketing*.
- Javanmardi, E., Liu, S., & Xie, N. (2023). Exploring the Challenges to Sustainable Development from the Perspective of Grey Systems Theory. *Systems*, 11(2). <https://doi.org/10.3390/systems11020070>
- Kamarudin, J., Novianti, M., & Ekonomi dan Bisnis Universitas Muhammadiyah Mamuju, F. (2022). Pengaruh Faktor Kemudahan, Keamanan, dan Resiko Terhadap Kepuasan Nasabah Dalam Menggunakan *Mobile banking* (Studi Kasus Pada Nasabah BRI Kabupaten Mamuju). *Jurnal Ilmiah Ilmu Manajemen*, 1(2), 2656–6265. <https://www.pinhome.id/blog/bank-terbesar-di-indonesia/>
- Karri, R. R., Mubarak, N. M., Bhagar, S. K., Tiyasha, T., Lingamdinne, L. P., Koduru, J. R., Ravidran, G., Tyagi, I., & Dehghani, M. H. (2024). Scientometrics and Overview of Water, Environment, and Sustainable Development Goals. *Elsevier*, 3–33.

- Karyani, E., & Obrien, V. V. (2020). *Green banking and Performance: The Role of Foreign and Public Ownership*. *Jurnal Dinamika Akuntansi Dan Bisnis*, 7(2), 221–234. <https://doi.org/10.24815/jdab.v7i2.17150>
- Khan, M. A., Siddique, A., & Sarwar, Z. (2020). Determinants of *Non-Performing Loans* in the banking sector in developing state. *Asian Journal of Accounting Research*, 5(1), 135–145. <https://doi.org/10.1108/AJAR-10-2019-0080>
- Khot, A. S. (2019). The Impact of *Mobile banking* on Customer Satisfaction. *International Journal of Trend in Scientific Research and Development*, 21.
- Kustina, K. T., & Sugiarto, Y. W. (2020). Pengaruh Penerapan Branchless Banking Dan E-Banking Terhadap Kinerja Keuangan Sektor Perbankan Di Indonesia. In *Jurnal Ilmiah Akuntansi dan Bisnis* (Vol. 5, Issue 1). <http://journal.undiknas.ac.id/index.php/akuntansi>
- Mir, A. A., & Bhat, A. A. (2022). *Green banking and Sustainability*. *Arab Gulf Journal of Scientific Research*, 40(3), 247–263. <https://doi.org/10.1108/AGJSR-04-2022-0017>
- Mirza, N., Umar, M., Afdal, A., & Firdousi, S. F. (2023). The Role of *Fintech* in Promoting Green Finance, and Profitability: Evidence from the Banking Sector in the Euro Zone. *Economic Analysis and Policy*, 78, 33–40.
- Nabil, M. (2023). The Impact of *Green bonds* on Banking Sector Performance: A Comparative Study on Developed and Emerging Markets. *Journal of Applied Finance & Banking*, 13(3), 67–85.
- Oboke, N. T., Patrick, K., & Daisy, B. (2022). Effect of Automated Teller Machines on Financial Performance of Commercial Banks Listed on the Nairobi Securities Exchange, Kenya. *IOSR Journal of Business and Management*, 24(4), 32–43.
- Otoritas Jasa Keuangan. (n.d.). *Mobile banking*. Retrieved March 26, 2024, from [https://sikapiuangmu.ojk.go.id/FrontEnd/images/FileDownload/417\\_Perbankan-4a%20mudah%20dan%20aman%20dengan%20internet%20banking%20dan%20mobile%20banking\\_2018\\_small.pdf](https://sikapiuangmu.ojk.go.id/FrontEnd/images/FileDownload/417_Perbankan-4a%20mudah%20dan%20aman%20dengan%20internet%20banking%20dan%20mobile%20banking_2018_small.pdf)
- Otoritas Jasa Keuangan. (2016). *Penerapan Manajemen Risiko Bagi Bank Umum*.
- Otoritas Jasa Keuangan. (2017a). *Penerapan Keuangan Berkelanjutan bagi Lembaga Jasa Keuangan, Emiten, dan Perusahaan Publik*.
- Otoritas Jasa Keuangan. (2017b). *Penerbitan Dan Persyaratan Efek Bersifat Utang Berwawasan Lingkungan*.

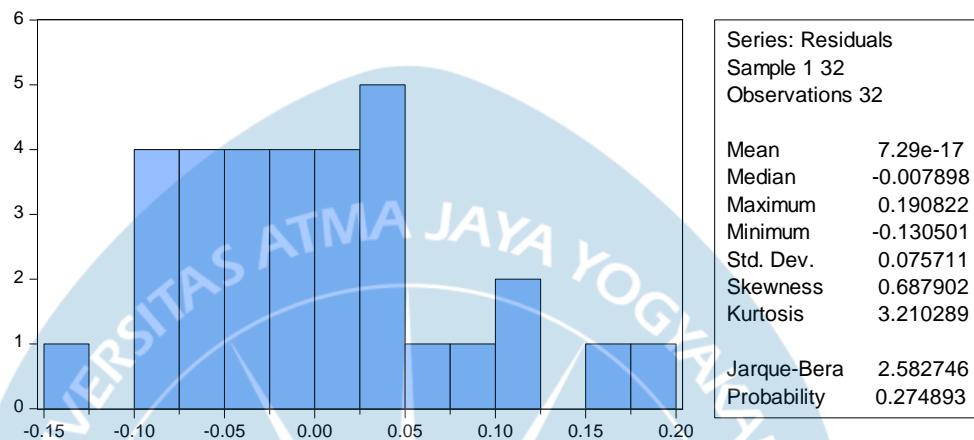
- Otoritas Jasa Keuangan. (2018). *Penyelenggaraan Layanan Perbankan Digital Oleh Bank Umum*.
- Otoritas Jasa Keuangan. (2021). *Bank Umum*.
- Pearce, D., Markandya, A., & Barbier, E. B. (1989). A New Blueprint for a Green Economy. In *A New Blueprint for a Green Economy*. Taylor and Francis. <https://doi.org/10.4324/9780203097298>
- Prisandy, R. F., & Widyaningrum, W. (2022). *Green bond in Indonesia: The Challenges and Opportunities*. BRIN Publishing.
- Pusat Pembinaan dan Pengembangan Bahasa. (2019). *Kamus Besar Bahasa Indonesia* (Vol. 5). PT Balai Pustaka.
- Rahadi, D. R., & Farid, M. M. (2021). *Monograf: Analisis Variabel Moderating*. CV. Lentera Ilmu Mandiri.
- Rahmadani, K., Darlis, E., & Kurnia, P. (2021). Pengungkapan Lingkungan Perusahaan: Ditinjau Manajemen Laba dan Mekanisme Tata Kelola Perusahaan yang Baik. *Jurnal Kajian Akuntansi Dan Bisnis Terkini*, 2(1), 94–107.
- Ratnasari, T., Surwanti, A., & Pribadi, F. (2021). Implementation of *green banking* and financial performance on commercial banks in indonesia. In *International Symposia in Economic Theory and Econometrics* (Vol. 28, pp. 323–336). Emerald Group Holdings Ltd. <https://doi.org/10.1108/S1571-038620210000028018>
- Redaksi OCBC NISP. (2022). *Non Performing Loan Adalah: Definisi, Rumus & Dampaknya*.
- Sakalasooriya, N. (2021). Conceptual Analysis of Sustainability and Sustainable Development. *Open Journal of Social Sciences*, 09(03), 396–414. <https://doi.org/10.4236/jss.2021.93026>
- Sanders, N. R., & Wood, J. D. (2019). *Foundations of Sustainable Business: Theory, Function, and Strategy* (Vol. 2). Wiley Global Education US.
- Santosa, J., & Dharmastuti, C. F. (2024). Can the Implementation of *Fintech* Improve Banking Performance? Evidence from Banking Industry in Indonesia. *Advances in Economics, Business and Management Research*, 256.
- Schindler, P. (2021). *Business Research Methods* (14th ed.). McGraw-Hill Higher Education.
- Sienatra, K. B. (2020). Determinan Kinerja Perbankan: Studi Empiris Pada Bank Di Indonesia. *Business Management Journal*, 16(1).

- Sihombing, R. (2021). *Analisis Regresi Data Panel*.  
<https://www.researchgate.net/publication/357051571>
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. ALFABETA.
- Syzdykov, Y., & Masse, J. (2019). *Emerging Market Green bonds Report 2019: Momentum Builds as Nascent Markets Grow*.
- The United Nations Environments Programme. (n.d.). *Green Economy*. Retrieved May 8, 2024, from <https://www.unep.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/green-economy>
- The World Bank. (2021). *What You Need to Know About IFC's Green bonds*.  
<https://www.worldbank.org/en/news/feature/2021/12/08/what-you-need-to-know-about-ifc-s-green-bonds>
- Thio, J. C., & Yusniar, M. W. (2021). *Pengaruh Mobile banking Terhadap Kinerja Keuangan Perbankan Indonesia*. XII(3).
- Tim Redaksi OCBC NISP. (2022). *ATM adalah: Pengertian, Jenis, Manfaat, dan Keuntungan*.
- Tobing, K. S. J. L., & Setiawati, W. (2022). *Tinjauan Y Tinjauan Yuridis Terhadap Efek Bersifat Utang Berkarakter Bersifat Utang Berwawasan Lingkungan (Green bond) Sebagai Instrumen Investasi Dalam Penerapan Sustainable Investment Di Pasar Modal Indonesia* . 2.
- Tölö, E., & Virén, M. (2021). How much do *Non-Performing Loans* hinder loan growth in Europe? *European Economic Review*, 136.  
<https://doi.org/10.1016/j.euroecorev.2021.103773>
- United Nations. (n.d.). *Sustainability*. Retrieved March 4, 2024, from <https://www.un.org/en/academic-impact/sustainability#:~:text=In%201987%2C%20the%20United%20Nations,development%20needs%2C%20but%20with%20the>
- United Nations Framework Convention on Climate Change. (2015). *The Paris Agreement*.
- Utomo, M. N., Rita, M. R., Pratiwi, S. R., & Puspitasari, I. (2022). *Green Business: Strategi Membangun Kewirausahaan Berdaya Saing dan Berkelanjutan*. Syiah Kuala University Press.
- Weber, O., & Feltmate, B. (2016). *Sustainable Banking and Finance: Managing the Social and Environmental Impact of Financial Institutions*. University of Toronto Press.

- Widarjono, A. (2018). *EKONOMETRIKA: Pengantar dan Aplikasinya Disertai Panduan Eviews* (5th ed.). UPP STIM YKPN.
- Wijaya, K. (2019). *Green bond*.
- Yeow, K. E., & Ng, S. H. (2021). The impact of *green bonds* on corporate environmental and financial performance. *Managerial Finance*, 47(10), 1486–1510. <https://doi.org/10.1108/MF-09-2020-0481>
- Yudaruddin, A., & Lesmana, D. (2022). *Mobile banking and Bank performance: Do Bank Ownership Types Matter?* *Hong Kong Journal of Social Sciences*, 60.
- Yulianto, N. A. B., Maskan, M., & Utaminingsih, A. (2018). *Metode Penelitian Bisnis*. UPT Percetakan dan Penerbitan Polinema.
- Yusnita, Hasibuan, L. S., Afif, Lubis, I. S., & Marpaung, M. (2024). *Praktikum Jasa Perbankan Untuk Perguruan Tinggi Vokasi*. Merdeka Kreasi Group.
- Yusup, F. (2018). *UJI VALIDITAS DAN RELIABILITAS INSTRUMEN PENELITIAN KUANTITATIF*. 17.
- Zhai, T., & Chang, Y.-C. (2018). Standing of Environmental Public-Interest Litigants in China: Evolution, Obstacles and Solutions. *Journal of Environmental Law*, 30(3), 369–397.

## LAMPIRAN

### Hasil Uji Normalitas



### Hasil Uji Multikolinearitas

Variance Inflation Factors  
Date: 05/02/24 Time: 12:43  
Sample: 1 32  
Included observations: 32

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.000233	1.174902	NA
X1	0.004105	1.055102	1.050360
X2	0.037854	1.351560	1.228064
Z	4.35E-05	1.391579	1.249149

### Hasil Uji Heterokedastisitas

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.381882	Prob. F(3,28)	0.7668
Obs*R-squared	1.257845	Prob. Chi-Square(3)	0.7392
Scaled explained SS	1.064296	Prob. Chi-Square(3)	0.7857

### Hasil Uji Autokorelasi

Test Equation:  
Dependent Variable: RESID  
Method: Least Squares

Date: 05/02/24 Time: 12:45  
 Sample: 1 32  
 Included observations: 32  
 Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002479	0.014022	0.176795	0.8611
X1	-0.010350	0.061809	-0.167458	0.8684
X2	0.127194	0.185624	0.685221	0.4995
Z	0.000185	0.006072	0.030472	0.9759
RESID(-1)	0.536529	0.204873	2.618838	0.0148
RESID(-2)	-0.040796	0.235378	-0.173322	0.8638
RESID(-3)	0.041790	0.209788	0.199199	0.8437
R-squared	0.257001	Mean dependent var	7.29E-17	
Adjusted R-squared	0.078682	S.D. dependent var	0.075711	
S.E. of regression	0.072671	Akaike info criterion	-2.215097	
Sum squared resid	0.132028	Schwarz criterion	-1.894467	
Log likelihood	42.44155	Hannan-Quinn criter.	-2.108817	
F-statistic	1.441239	Durbin-Watson stat	1.902979	
Prob(F-statistic)	0.238743			

Hasil Regresi X1, X2, dan X3 terhadap Y

Dependent Variable: Y  
 Method: Panel Least Squares  
 Date: 05/08/24 Time: 11:02  
 Sample: 2016 2023  
 Periods included: 8  
 Cross-sections included: 4  
 Total panel (balanced) observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.229562	0.015265	15.03880	0.0000
X1	-0.049524	0.064072	-0.772948	0.4460
X2	-0.337209	0.194561	-1.733177	0.0941
Z	0.003125	0.006598	0.473655	0.6394
R-squared	0.146508	Mean dependent var	0.241406	
Adjusted R-squared	0.055063	S.D. dependent var	0.081952	
S.E. of regression	0.079664	Akaike info criterion	-2.105536	
Sum squared resid	0.177697	Schwarz criterion	-1.922319	
Log likelihood	37.68857	Hannan-Quinn criter.	-2.044804	
F-statistic	1.602137	Durbin-Watson stat	0.913255	
Prob(F-statistic)	0.211156			

### Data Jumlah Green Bond Tahun 2016-2023

Tahun	BNI	BRI	Mandiri	BCA
2016	3.000.000.000.000	0	0	0
2017	3.000.000.000.000	0	0	0
2018	3.000.000.000.000	8.086.925.000.000	0	0
2019	3.000.000.000.000	8.086.925.000.000	0	0
2020	3.000.000.000.000	8.086.925.000.000	0	0
2021	3.000.000.000.000	8.086.925.000.000	4.851.000.000.000	0
2022	5.000.000.000.000	5.000.000.000.000	4.851.000.000.000	0
2023	5.000.000.000.000	6.000.000.000.000	5.000.000.000.000	0

### Data Jumlah Unit ATM Tahun 2016-2023

Tahun	unit (total dalam dan luar negeri)			
	BNI	BRI	Mandiri	BCA
2016	17.056	24.292	17.461	17.207
2017	17.966	24.684	17.766	17.658
2018	18.311	22.684	17.376	17.778
2019	18.659	191.84	18.291	17.928
2020	18.230	16.880	13.217	17.623
2021	16.385	14.463	13.087	18.034
2022	16.125	13.863	13.027	18.268
2023	13.390	12.263	12.906	19.047

### Data Jumlah Pengguna Mobile Banking Tahun 2016-2023

Tahun	BNI	BRI	Mandiri	BCA
2016	506 ribu	15,3 juta	7.330.684	15 juta
2017	1.368 ribu	18,5 juta	7.533.248	17 juta
2018	2,9 juta	22,7 juta	13.065.508	19 juta
2019	4.878 ribu	26,2 juta	8.767.435	21 juta
2020	7.787 ribu	2,9 juta	6,53 juta	24 juta
2021	10,8 juta	7,2 juta	9,77 juta	22,8 juta
2022	13,6 juta	23,85 juta	16 juta	20,8 juta
2023	16 juta	31,6 juta	22,8 juta	30,3 juta

### Data Rasio NPL Tahun 2016-2023

Tahun	BNI	BRI	Mandiri	BCA
2016	3,00%	2,03%	3,97%	1,3%

2017	2,3%	2,10%	3,45%	1,5%
2018	1,9%	2,14%	2,79%	1,4%
2019	1,6%	2,62%	2,39%	1,3%
2020	4,3%	2,94%	3,29%	1,8%
2021	3,7%	3,08%	2,81%	2,2%
2022	2,8%	2,82%	1,88%	1,7%
2023	2,1%	3,12%	1,02%	1,9%

