# DAFTAR PUSTAKA

Adityantoro, W., & Rahardjo, S. (2020). Faktor Yang Mempengaruhi Profitabilitas Perbankan Syariah Di Indonesia. *Jurnal Syarikah : Jurnal Ekonomi Islam, 6*(1), 104-116. https://doi.org/10.30997/jsei.v6i1.2175

Ajiidyaningrum, N. (2019). Pengaruh *Good Corporate Governance*, Struktur Modal, Ukuran Perusahaan, Umur Perusahaan, Pertumbuhan, dan Likuiditas Terhadap Kinerja Perusahaan. *Jurnal Akuntansi* *Fakultas Ekonomi UII, 8*–31 https://dspace.uii.ac.id/handle/123456789/17973

Anindyastri, R., Lestari, W. D., & Solahuddin, M. (2022). *The Influence of Financial Technology (Fintech) on the Financial Performance of Islamic Banking (Study on Islamic Banking listed on the Indonesia Stock Exchange Benefit: Jurnal Manajemen dan Bisnis 7(1)* 80-92. https://journals.ums.ac.id/.

Arif, A. (2019). Pengaruh Risiko Kredit Dan Ukuran Perusahaan Terhadap Net Interest Margin (Nim) Di Sektor Perbankan. *Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik, 13*(1), 1–14.https://doi.org/10.2/vl3il.4955

Arikunto, S. (2013). *Manajemen Penelitian*. Jakarta: Rineka Cipta.

Bringham, E. F., & Houston, J. F. (2006). *Dasar-Dasar Manajemen Keuangan* (10 (ed.)). Jakarta: Salemba Empat.

Dendawijaya, L. (2005). *Manajemen Perbankan* (2nd ed.). Bogor: Ghalia Indonesia.

Dini, N., & Manda, G. (2020). Pengaruh CAR, NPL, NIM, BOPO, LDR dan Suku Bunga SBI Terhadap ROA Bank BUMN Periode Tahun 2009-2018. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana, 9(2)*, 899-915. https://doi.org/10.24843/eeb.2020.v09.i09.p05

Fahmi, I. (2014). *Analisa Kinerja Keuangan*. Bandung: Alfabeta.

Ghozali, I. (2018). *Aplikasi Analisis Multivariate Dengan Program SPSS 25* (9th ed.). Semarang: Universitas Diponegoro.

Hartono, J. (2005). *Analisis dan Desain Sistem Informasi: Pendekatan Terstruktur dan praktek Aplikasi Bisnis*. Yogyakarta: Andi.

Hartono, J. (2008). *Teori Portofolio dan Analisis Investasi* (5th ed.). Yogyakarta: BPFE.

Hery. (2016). *Analisis Laporan Keuangan Integrated and Comprehensive Edition.* Jakarta: Grasindo.

Hery. (2017). *Kajian Riset Akuntansi*. Jakarta: Grasindo.

Iskandar. (2008). *Metodologi Penelitian Pendidikan dan Sosial (Kuantitatif dan Kualitatif)*. Jakarta: GP Press.

Ismadi, & Irawati, Z. (2019). Analisis Pengaruh *Capital Adequacy Ratio, Net Interest Margin, Non Performing Loan*, Biaya Operasional Terhadap Pendapatan Operasional, *Loan to Deposit Ratio,* dan *Size* Terhadap Profitabilitas (Studi Kasus Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia Periode 2013-2017). *Proceeding Of The URECOL*, 10, 55–68. http://eprints.ums.ac.id/75295/19/Naskah%20Publikasi-5

Kasmir. (2010). *Pengantar Manajemen Keuangan*. Jakarta: Kencana Prenada Media Group.

Kasmir. (2012). *Analisis Laporan Keuangan*. Jakarta: PT Raja Grafindo Persada.

Kasmir. (2016). *Analisis Laporan Keuangan*. Jakarta: PT Raja Grafindo Persada.

Kuncoro, M., & Suhardjono. (2011). *Manajemen Perbankan Teori dan Aplikasi* (2nd ed.). Yogyakarta: BPFE.

Linggasari, Y., & Adnantara, K. (2020). Pengaruh DER, Firm Size, CR, Dan WCTO Terhadap ROA Pada Perusahaan Manufaktur Yang Terdaftar Di Bei Periode 2016-2018. *Journal Research Accounting, 02*(1), 21–32. https://www.cnbcindonesia.com/market/20190809100011-17-90855

Mukaromah, N., & Supriono, S. (2020). Pengaruh Kecukupan Modal, Risiko Kredit, Efisiensi Operasional, Dan Likuiditas Terhadap Profitabilitas Perbankan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2015 – 2017. *Journal of Economic, Management, Accounting and Technology*, 3(1), 67–78. https://doi.org/10.32500/jematech.v3i1.1082

Mustafa, A., & Sulistyowati, E. (2022). Pengaruh *Capital Adequacy Ratio, Non Performing Loan, Loan To Deposit Ratio,* dan *Firm Size* Terhadap Profitabilitas BUMN Sektor Perbankan Periode 2012-2020. *Jurnal Proaksi, 9*(1), 84–96. https://doi.org/10.32534/jpk.v9i1.2511

Natanael, N., & Mayangsari, S. (2022). Pengaruh NIM, BOPO, CAR dan Ukuran Perusahaan Terhadap Profitabilitas Perusahaan Sektor Perbankan. *Jurnal Ekonomi Trisakti* 2(2),1091-1102. https://journal.trisakti.ac.id/index/14682

Nihayati, A., Wahyudi, S., & Syaichu, M. (2014). Pengaruh Ukuran Bank, Bopo, Risiko Kredit, Kinerja Kredit, Dan Kekuatan Pasar Terhadap Net Interest Margin (Studi Perbandingan pada Bank Persero dan Bank Asing Periode Tahun 2008-2012). *Jurnal Bisnis Strategi* 23(2), 14–44. https://ejournal.undip.ac.id/index.php/jbs/article/view/14375

Oktaviani, S., Suyono, & Mujiono. (2019). Analisis Pengaruh CAR, BOPO, LDR, NIM dan Ukuran Perusahaan Terhadap Profitabilitas Bank yang Terdaftar di Bursa Efek Indonesia Tahun 2012-2017. *Jurnal Ilmiah Akuntansi,* 218(2), 218–231. http://www.ejournal.pelitaindonesia.ac.id/ojs32/index.php/BILANCIA/index

Pandia, F. (2017). *Manajemen Dana dan Kesehatan Bank*. Jakarta: Rineka Cipta.

Prasetyo, D., & Darmayanti, N. (2015). Pengaruh Risiko Kredit, Likuiditas, Kecukupan Modal, Dan Efisiensi Operasional Terhadap Profitabilitas Pada Pt Bpd Bali. *E-Jurnal Manajemen Universitas Udayana*, 4(9), 253294. https://www.neliti.com/id/publications/253294

Putri, C. (2015). Pengaruh NPL, LDR, CAR terhadap Profitabilitas Bank Umum Swasta Nasional Devisa. *Jurnal Ilmu Dan Riset Manajemen*, 4(4), 1–16. http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/3340

Putri, N., Wiagustini, L., & Abundanti, N. (2018). Pengaruh NPL, CAR Dan BOPO Terhadap Profitabilitas Pada BPR Di Kota Denpasar Periode 2013-2016. *E-Jurnal Manajemen Universitas Udayana,* 7(11) ,6212. https://doi.org/10.24843/ejmunud.2018.v07.i11.p15

Rahmawati, R., Zulaihati, S., & Fauzi, A. (2020). Pengaruh LDR, NPL dan Ukuran Perusahaan Terhadap Profitabilitas Bank yang Terdaftar di Otoritas Jasa Keuangan (OJK). *Jurnal Akuntansi, Perpajakan Dan Auditing,* 1(2), 280–294. http://pub.unj.ac.id/index.php/japa/article/view/418

Riyanto, B. (2001). *Dasar-dasar Pembelanjaan Perusahaan*. Yogyakarta: BPFE.

Sartono, A. (2010). *Manajemen Keuangan: Teori dan Aplikasi* (Ed.4). Yogyakarta: BPFE.

Sawir, A. (2009). *Analisis Kinerja Keuangan dan Perencanaan Keuangan Perusahaan*. Jakarta: PT Gramedia Pustaka Utama.

Siagian, S., Lidwan, N., Ridwan, W., Taruan, H., & Roni. (2021). Pengaruh BOPO, LDR, dan NIM Perbankan Terhadap ROA Di Industri Perbankan Indonesia Periode 2019-2021. *Jurnal Akrab Juara UBSI*, 14(1), 1–13. https://akrabjuara/index.php/view/1579

Sudana, I. M. (2011). *Manajemen Keuangan Perusahaan Teori dan Praktik*. Jakarta: Erlangga.

Sugiyono. (2016). *Metode Penelitian kuantitatif, kualitatif R&D*. Bandung: Alfabeta.

Sukraeni, P. (2022). Pengaruh *Capital Adequacy Ratio, Loan to Deposit Ratio, dan Non Performing Loan* Terhadap Profitabilitas Bank Umum Yang Terdaftar di Bursa Efek Indonesia Tahun 2019-2021. *Jurnal Ilmiah Manajemen Kesatuan*, *9*(2) 131-140. http://repo.undiksha.ac.id/eprint/10831

Suliyanto. (2018). *Metode Penelitian Bisnis*. Yogyakarta: Andi.

Sutrisno. (2001). *Manajemen Keuangan Teori, Konsep, Dan Aplikasi*. Yogyakarta: Ekonisia.

Sutrisno, S. (2018). Risiko dan kinerja Bank Perkreditan Rakyat: Studi perbandingan antara BPR Syariah dengan Konvensional di Indonesia Periode 2015 dan 2016. inferensi: *Jurnal Penelitian Sosial Keagamaan, 11*(2), 309–328. https://doi.org/10.18326/l3.v11i2.309-328

Ulum, I. (2017). *Intellectual Capital: Model Pengukuran, Framework Pengungkapan & Kinerja Orrganisasi* (3rd ed.). Malang: UMM Pess.

Wanisih, H., Suhendro, & Chomsatu, Y. (2018). Pengaruh *Firm Size, Current Ratio, Financial Leverage, Total Asset Turnover* Terhadap Profitabilitas Pada Perusahaan Manufaktur Yang Terdaftar di BEI Periode 2016-2018. *Jurnal Akuntansi dan Ekonomi, 6*(1), 56–65. https://doi.org/29407/v6i.14076

https://www.idx.co.id/2019

https://www.idx.co.id/2020

https://www.idx.co.id/2021

https://www.idx.co.id/2022

https://id.wikipedia.org/wiki/Bursa\_Efek\_Indonesia

**LAMPIRAN**

# LAMPIRAN

Lampiran 1

Data Sampel Penelitian

|  |  |  |
| --- | --- | --- |
| **No** | **Kode** | **Nama Perusahaan** |
| 1. | AGRO | PT Bank Raya Indonesia Tbk. |
| 2. | AMAR | PT Bank Amar Indonesia Tbk. |
| 3. | ARTO | PT Bank Jago Tbk. |
| 4. | BABP | PT Bank MNC Intetrnasional Tbk. |
| 5. | BBCA | PT Bank Central Asia Tbk. |
| 6. | BBHI | PT Allo Bank Indonesia Tbk. |
| 7. | BBKP | PT Bank KB Bukopin Tbk. |
| 8. | BBMD | PT Bank Mestika Dharma Tbk. |
| 9. | BBNI | PT Bank Negara Indonesia (Persero) Tbk. |
| 10. | BBRI | PT Bank Rakyat Indonesia (Persero) Tbk. |
| 11. | BBSI | PT Krom Bank Indonesia Tbk. |
| 12. | BBTN | PT Bank Tabungan Negara (Persero) Tbk. |
| 13. | BBYP | PT Bank Neo Commerce Tbk. |
| 14. | BCIC | PT Bank Jtrust Indonesia Tbk. |
| 15. | BDMN | PT Bank Danamon Indonesia Tbk. |
| 16. | BEKS | PT Bank Pembangunan Daerah Banten Tbk. |
| 17. | BGTG | PT Bank Ganesha Tbk. |
| 18. | BINA | PT Bank Ina Perdana Tbk |
| 19. | BJBR | Bank Pembangunan Daerah Jawa Barat dan Banten Tbk. |
| 20. | BJTM | Bank Pembangunan Daerah Jawa Timut Tbk. |
| 21. | BKSW | PT Bank QNB Indonesia Tbk. |
| 22. | BMAS | PT Bank Maspion Indonesia Tbk. |
| 23. | BMRI | PT Bank Mandiri (Persero) Tbk |
| 24. | BNBA | Bank Bumi Artha Tbk. |
| 25. | BNGA | PT Bank CIMB Niaga Tbk. |
| 26. | BNII | PT Bank Maybank Indonesia Tbk. |
| 27. | BNLI | Bank Permata Tbk. |
| 28. | BRIS | PT Bank Syariah Indonesia Tbk. |
| 29. | BSIM | Bank Sinarmas Tbk. |
| 30. | BTPS | PT Bank BTPN Syariah Tbk. |
| 31. | BVIC | Bank Victoria Internasional Tbk. |
| 32. | DNAR | PT Bank Oke Indonesia Tbk. |
| 33. | INPC | Bank Artha Graha Internasional Tbk. |
| 34. | MASB | Bank Multiarta Sentosa Tbk |
| 35. | MAYA | PT Bank Mayapada Internasional Tbk. |
| 36. | MCOR | PT Bank China Construction Bank Indonesia Tbk. |
| 37. | MEGA | PT Bank Mega Tbk. |
| 38. | NISP | PT Bank OCBC NISP Tbk. |
| 39. | NOBU | PT Bank Nationalnobu Tbk. |
| 40. | PNBN | Bank Pan Indonesia Tbk. |
| 41. | PNBS | PT Bank Panin Dubai Syariah Tbk. |
| 42. | SDRA | PT Bank Woori Saudara Indonesia 1906 Tbk. |

Lampiran 2

**Data Variabel ROA**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Kode** | **2019** | **2020** | **2021** | **2022** |
| 1. | AGRO | 0.31 | 0.24 | -14.75 | 0.85 |
| 2. | AMAR | 2.99 | 0.74 | 0.02 | -4.75 |
| 3. | ARTO | -15.89 | -11.27 | 0.1 | 0.14 |
| 4. | BABP | 0.27 | 0.15 | 0.18 | 1.04 |
| 5. | BACA | 0.13 | 0.44 | 0.22 | 0.18 |
| 6. | BBHI | -1.87 | 2.04 | 4.74 | 3.55 |
| 7. | BBKP | 0.13 | -4.61 | -4.93 | -6.27 |
| 8. | BBMD | 2.72 | 3.17 | 4.31 | 3.97 |
| 9. | BBNI | 2.4 | 0.5 | 1.4 | 2.5 |
| 10. | BBRI | 3.5 | 1.98 | 2.72 | 3.76 |
| 11. | BBSI | 2.87 | -3.36 | -3.06 | 0.17 |
| 12. | BBTN | 0.13 | 0.69 | 0.81 | 1.02 |
| 13. | BBYP | 0.37 | 0.34 | -13.71 | -5.2 |
| 14. | BCIC | 0.29 | -3.36 | -3.06 | 0.17 |
| 15. | BDMN | 3 | 1 | 1.2 | 2.3 |
| 16. | BEKS | -2.09 | -3.8 | -2.94 | -3.31 |
| 17. | BGTG | 0.32 | 0.1 | 0.23 | 0.6 |
| 18. | BINA | 0.23 | 0.51 | 0.44 | 1.09 |
| 19. | BJBR | 1.68 | 1.66 | 1.73 | 1.75 |
| 20. | BJTM | 2.73 | 1.95 | 2.05 | 1.95 |
| 21. | BKSW | 0.02 | -1.24 | -8.5 | -2.42 |
| 22. | BMAS | 1.13 | 1.09 | 0.79 | 1.06 |
| 23. | BMRI | 3.03 | 1.64 | 2.53 | 3.3 |
| 24. | BNBA | 0.96 | 0.7 | 0.74 | 0.59 |
| 25. | BNGA | 1.99 | 1.06 | 1.88 | 2.16 |
| 26. | BNII | 1.45 | 1.04 | 1.34 | 1.25 |
| 27. | BNLI | 1.3 | 0.9 | 0.7 | 1.1 |
| 28. | BRIS | 1.44 | 1.38 | 1.61 | 1.98 |
| 29. | BSIM | 0.23 | 0.3 | 0.34 | 0.54 |
| 30. | BTPS | 13.58 | 7.16 | 10.72 | 11.43 |
| 31. | BVIC | -0.09 | -1.26 | 0.71 | 1.47 |
| 32. | DNAR | 0.27 | 0.35 | 0.38 | 0.22 |
| 33. | INPC | -0.3 | 0.11 | -0.73 | 0.25 |
| 34. | MASB | 1.28 | 0.83 | 1.19 | 1.86 |
| 35. | MAYA | 0.78 | 0.12 | 0.07 | 0.04 |
| 36. | MCOR | 0.71 | 0.29 | 0.41 | 0.57 |
| 37. | MEGA | 2.9 | 3.64 | 4.22 | 4 |
| 38. | NISP | 2.22 | 1.47 | 1.55 | 1.86 |
| 39. | NOBU | 0.52 | 0.57 | 0.54 | 0.64 |
| 40. | PNBN | 6.5 | 5.7 | 4 | 5.3 |
| 41. | PNBS | 0.25 | 0.06 | -6.72 | 1.79 |
| 42. | SDRA | 2 | 1.84 | 2 | 2.33 |

**Data Variabel *Non Performing Loan***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Kode** | **2019** | **2020** | **2021** | **2022** |
| 1. | AGRO | 7.66 | 4.97 | 3.98 | 2.9 |
| 2. | AMAR | 4.49 | 6.93 | 6.58 | 6.09 |
| 3. | ARTO | 2.05 | 0.05 | 0.58 | 1.82 |
| 4. | BABP | 5.78 | 5.69 | 4.42 | 3.53 |
| 5. | BBCA | 1.3 | 1.8 | 2.2 | 1.7 |
| 6. | BBHI | 10.16 | 2.76 | 0.52 | 0.08 |
| 7. | BBKP | 5.99 | 10.16 | 10.66 | 6.56 |
| 8. | BBMD | 2.26 | 1.69 | 1.18 | 1.26 |
| 9. | BBNI | 2.3 | 4.3 | 3.7 | 2.8 |
| 10. | BBRI | 2.62 | 2.94 | 3.08 | 2.82 |
| 11. | BBSI | 1.33 | 4.97 | 3.9 | 1.8 |
| 12. | BBTN | 4.78 | 4.37 | 3.7 | 3.38 |
| 13. | BBYP | 4.32 | 4.05 | 1.75 | 2.56 |
| 14. | BCIC | 1.49 | 4.97 | 3.9 | 1.8 |
| 15. | BDMN | 3 | 2.8 | 2.7 | 2.6 |
| 16. | BEKS | 5.01 | 22.27 | 14.09 | 9.45 |
| 17. | BGTG | 2.28 | 5.49 | 5.13 | 2.01 |
| 18. | BINA | 4.76 | 1.43 | 2.62 | 1.73 |
| 19. | BJBR | 1.58 | 1.4 | 1.24 | 1.16 |
| 20. | BJTM | 2.77 | 4 | 4.48 | 2.83 |
| 21. | BKSW | 5.63 | 4.66 | 0.08 | 0.38 |
| 22. | BMAS | 2.34 | 1.93 | 1.67 | 1.21 |
| 23. | BMRI | 2.39 | 3.29 | 2.81 | 1.88 |
| 24. | BNBA | 1.53 | 2.63 | 3.04 | 4.56 |
| 25. | BNGA | 2.79 | 3.62 | 3.46 | 2.8 |
| 26. | BNII | 3.33 | 4 | 3.69 | 3.46 |
| 27. | BNLI | 2.8 | 2.9 | 3.2 | 3.1 |
| 28. | BRIS | 3.21 | 2.88 | 2.93 | 2.42 |
| 29. | BSIM | 7.83 | 4.75 | 4.64 | 7.99 |
| 30. | BTPS | 1.36 | 1.91 | 2.37 | 2.65 |
| 31. | BVIC | 6.77 | 7.58 | 7.27 | 4.23 |
| 32. | DNAR | 2.95 | 3.52 | 3.58 | 2.75 |
| 33. | INPC | 5.71 | 4.58 | 3.39 | 2.73 |
| 34. | MASB | 4.15 | 3.66 | 2.48 | 3.09 |
| 35. | MAYA | 3.85 | 4.09 | 3.93 | 4.7 |
| 36. | MCOR | 2.52 | 2.94 | 4.39 | 4.92 |
| 37. | MEGA | 2.46 | 1.39 | 1.12 | 1.23 |
| 38. | NISP | 1.72 | 1.93 | 2.36 | 2.42 |
| 39. | NOBU | 2.09 | 0.21 | 0.58 | 0.41 |
| 40. | PNBN | 3.02 | 3.01 | 3.54 | 3.53 |
| 41. | PNBS | 3.81 | 3.38 | 1.19 | 3.31 |
| 42. | SDRA | 1.64 | 1.12 | 0.93 | 1.05 |

**Data Variabel BOPO**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Kode** | **2019** | **2020** | **2021** | **2022** |
| 1. | AGRO | 96.64 | 97.12 | 287.86 | 93.34 |
| 2. | AMAR | 89.44 | 96.73 | 99.76 | 119.36 |
| 3. | ARTO | 258.09 | 261.1 | 98.52 | 99.19 |
| 4. | BABP | 95.21 | 98.07 | 97.81 | 88.16 |
| 5. | BBCA | 59.1 | 63.5 | 54.2 | 46.5 |
| 6. | BBHI | 116.84 | 82.23 | 52.38 | 60.51 |
| 7. | BBKP | 98.98 | 168.1 | 171.2 | 226.22 |
| 8. | BBMD | 71.48 | 67.59 | 51.7 | 52.74 |
| 9. | BBNI | 73.2 | 93.3 | 81.2 | 68.6 |
| 10. | BBRI | 70.1 | 81.22 | 74.3 | 64.2 |
| 11. | BBSI | 69.46 | 146.66 | 122.55 | 99.04 |
| 12. | BBTN | 98.12 | 91.61 | 89.28 | 86 |
| 13. | BBYP | 97.24 | 96.71 | 224.01 | 127.28 |
| 14. | BCIC | 99.92 | 146.66 | 122.55 | 99.04 |
| 15. | BDMN | 84.5 | 88.9 | 86.6 | 72.9 |
| 16. | BEKS | 129.22 | 164.9 | 158.33 | 226.17 |
| 17. | BGTG | 96.69 | 98.4 | 94.81 | 86.63 |
| 18. | BINA | 96.8 | 93.8 | 92.42 | 82.43 |
| 19. | BJBR | 84.23 | 83.95 | 81.94 | 80.35 |
| 20. | BJTM | 71.4 | 77.76 | 75.95 | 76.15 |
| 21. | BKSW | 101.91 | 116.14 | 234.5 | 93.73 |
| 22. | BMAS | 87.1 | 87.58 | 89.48 | 84.99 |
| 23. | BMRI | 67.44 | 80.03 | 67.26 | 57.35 |
| 24. | BNBA | 89.55 | 92.02 | 88.87 | 91.31 |
| 25. | BNGA | 82.44 | 89.38 | 78.37 | 74.1 |
| 26. | BNII | 85.78 | 87.83 | 82.69 | 83.1 |
| 27. | BNLI | 87 | 88.8 | 90.1 | 82.4 |
| 28. | BRIS | 85.27 | 84.61 | 80.46 | 75.88 |
| 29. | BSIM | 119.43 | 111.7 | 97.12 | 93.27 |
| 30. | BTPS | 58.07 | 72.42 | 59.97 | 58.12 |
| 31. | BVIC | 100.69 | 112.09 | 104.94 | 79.44 |
| 32. | DNAR | 102.21 | 95.82 | 95.33 | 97.28 |
| 33. | INPC | 105.11 | 97.75 | 111.09 | 96.26 |
| 34. | MASB | 85.02 | 86.73 | 76.68 | 68.6 |
| 35. | MAYA | 92.16 | 98.41 | 98.83 | 99.32 |
| 36. | MCOR | 91.49 | 97.7 | 92.75 | 90.29 |
| 37. | MEGA | 56.76 | 56.06 | 65.94 | 74.1 |
| 38. | NISP | 74.77 | 81.13 | 76.5 | 71.09 |
| 39. | NOBU | 93.18 | 92.16 | 91.33 | 89.27 |
| 40. | PNBN | 77.96 | 77.79 | 78.43 | 78.09 |
| 41. | PNBS | 97.74 | 99.42 | 202.74 | 76.99 |
| 42. | SDRA | 70.32 | 74.22 | 70.32 | 67.3 |

**Data Variabel *Firm Size***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Kode** | 2019 | 2020 | 2021 | 2022 |
| 1. | AGRO | 30.93 | 30.96 | 30.46 | 30.26 |
| 2. | AMAR | 28.87 | 29.03 | 29.28 | 29.14 |
| 3. | ARTO | 27.91 | 28.41 | 30.14 | 30.46 |
| 4. | BABP | 29.99 | 30.09 | 30.27 | 30.46 |
| 5. | BBCA | 34.45 | 34.61 | 34.74 | 34.81 |
| 6. | BBHI | 28.56 | 28.58 | 29.17 | 30.03 |
| 7. | BBKP | 32.24 | 32.01 | 32.12 | 32.13 |
| 8. | BBMD | 30.19 | 30.28 | 30.4 | 30.44 |
| 9. | BBNI | 34.37 | 34.36 | 34.5 | 34.57 |
| 10. | BBRI | 34.89 | 35.02 | 35.06 | 35.16 |
| 11. | BBSI | 27.58 | 28 | 28.54 | 31.15 |
| 12. | BBTN | 33.37 | 33.52 | 33.55 | 33.63 |
| 13. | BBYP | 29.26 | 29.32 | 30.06 | 30.61 |
| 14. | BCIC | 30.48 | 30.42 | 30.69 | 31.15 |
| 15. | BDMN | 32.9 | 32.93 | 32.89 | 32.92 |
| 16. | BEKS | 29.72 | 29.31 | 29.11 | 29.61 |
| 17. | BGTG | 29.2 | 29.31 | 29.78 | 29.82 |
| 18. | BINA | 29.29 | 29.76 | 30.34 | 30.65 |
| 19. | BJBR | 32.45 | 32.58 | 32.7 | 32.83 |
| 20. | BJTM | 31.97 | 32.06 | 32.24 | 32.27 |
| 21. | BKSW | 30.77 | 30.54 | 30.5 | 30.45 |
| 22. | BMAS | 29.66 | 29.94 | 30.29 | 30.34 |
| 23. | BMRI | 34.88 | 34.97 | 35.08 | 35.23 |
| 24. | BNBA | 29.66 | 29.66 | 29.79 | 29.74 |
| 25. | BNGA | 33.25 | 33.27 | 33.37 | 33.36 |
| 26. | BNII | 32.79 | 32.77 | 32.77 | 32.74 |
| 27. | BNLI | 32.72 | 32.92 | 33.09 | 33.17 |
| 28. | BRIS | 32.96 | 33.11 | 33.21 | 33.35 |
| 29. | BSIM | 31.23 | 31.43 | 31.6 | 31.49 |
| 30. | BTPS | 30.36 | 30.43 | 30.55 | 30.68 |
| 31. | BVIC | 31.05 | 30.9 | 30.85 | 30.89 |
| 32. | DNAR | 29.26 | 29.47 | 29.68 | 29.95 |
| 33. | INPC | 30.87 | 31.05 | 30.89 | 30.87 |
| 34. | MASB | 30.3 | 30.7 | 30.78 | 30.69 |
| 35. | MAYA | 32.17 | 32.16 | 32.41 | 32.54 |
| 36. | MCOR | 30.57 | 30.86 | 30.9 | 30.85 |
| 37. | MEGA | 32.24 | 32.35 | 32.52 | 32.59 |
| 38. | NISP | 32.83 | 32.96 | 33 | 33.11 |
| 39. | NOBU | 30.21 | 30.25 | 30.66 | 30.73 |
| 40. | PNBN | 31.04 | 31.11 | 31.13 | 31.15 |
| 41. | PNBS | 30.04 | 30.06 | 30.3 | 30.33 |
| 42. | SDRA | 31.24 | 31.27 | 31.41 | 31.57 |

Lampiran 3

**Data Ouput Hasil Pengolahan SPSS**

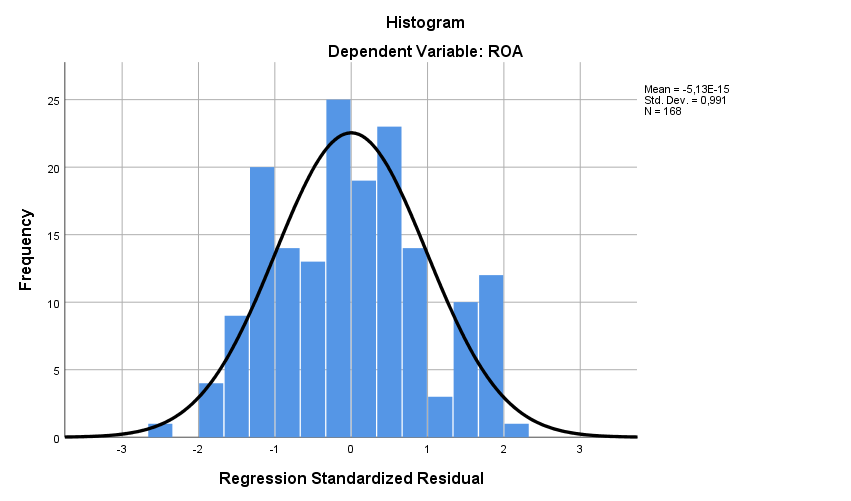
1. **Uji Statistik Deskriptif Variabel Independen dan Variabel Dependen**

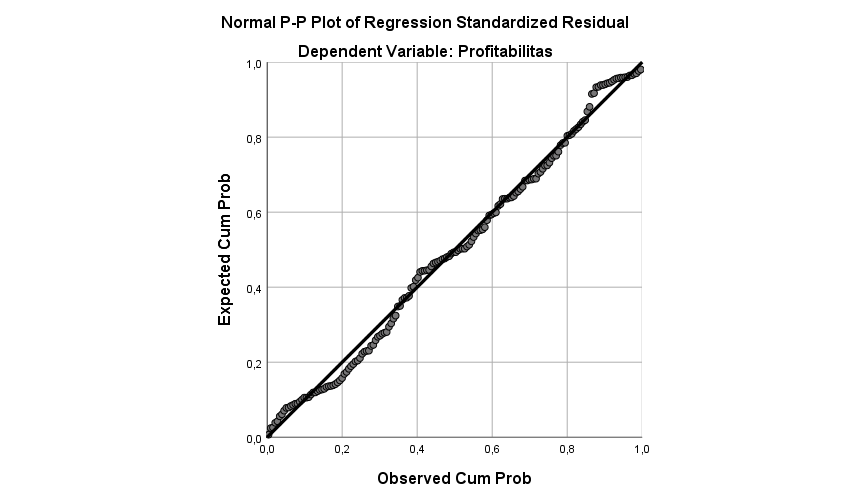
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Descriptive Statistics** | | | | | |
|  | N | Minimum | Maximum | Mean | Std. Deviation |
| NPL | 168 | ,05 | 22,27 | 3,4739 | 2,57999 |
| BOPO | 168 | 46,50 | 287,86 | 96,0146 | 38,66285 |
| FM | 168 | 27,58 | 35,23 | 31,3702 | 1,74424 |
| ROA | 168 | -15,89 | 13,58 | ,7052 | 3,52041 |
| Valid N (listwise) | 168 |  |  |  |  |

1. **Uji Normalitas**

**Uji One-Sample Kolmogorov-Smirnov Test**

|  |  |  |
| --- | --- | --- |
| **One-Sample Kolmogorov-Smirnov Test** | | |
|  | | Unstandardized Residual |
| N | | 168 |
| Normal Parametersa,b | Mean | ,0000000 |
| Std. Deviation | ,90845704 |
| Most Extreme Differences | Absolute | ,060 |
| Positive | ,047 |
| Negative | -,060 |
| Test Statistic | | ,060 |
| Asymp. Sig. (2-tailed) | | ,200c,d |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |
| c. Lilliefors Significance Correction. | | |
| d. This is a lower bound of the true significance. | | |

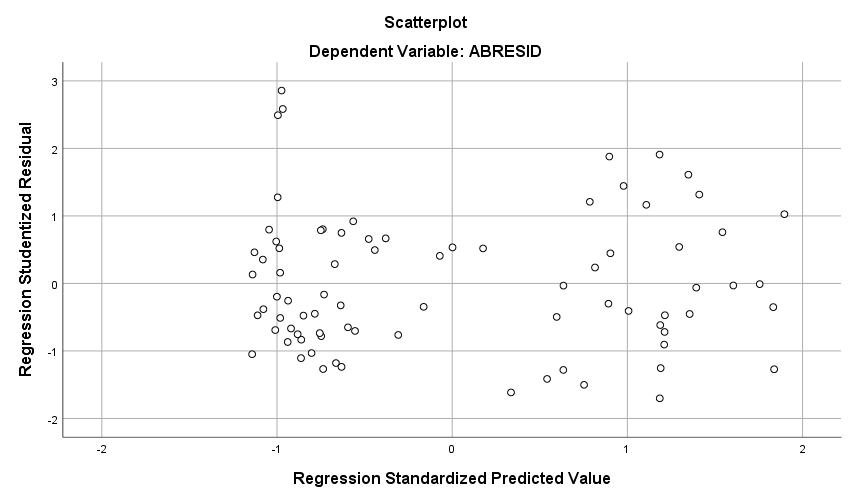




1. **Uji Multikolinieritas**

|  |  |  |  |
| --- | --- | --- | --- |
| **Coefficientsa** | | | |
| Model | | Collinearity Statistics | |
| Tolerance | VIF |
| 1 | NPL | ,890 | 1,124 |
| BOPO | ,793 | 1,261 |
| Firm Size | ,866 | 1,155 |
| a. Dependent Variable: ROA | | | |

1. **Uji Heteroskedastisitas**



1. **Uji Autokorelasi**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model Summaryb** | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | ,783a | ,612 | ,605 | 2,50349 | 2,2159 |
| a. Predictors: (Constant), NPL, BOPO, Firm Size | | | | | |
| b. Dependent Variable: ROA | | | | | |

1. **Analisis Regresi Linear Berganda**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Coefficientsa** | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | -17,710 | 2,093 |  | -8,463 | ,000 |
| NPL | ,129 | ,081 | ,085 | 1,592 | ,113 |
| BOPO | -,059 | ,005 | -,593 | -11,131 | ,000 |
| Firm Size | ,743 | ,066 | ,548 | 11,229 | ,000 |
| a. Dependent Variable: ROA | | | | | | |

1. **Uji signifikansi Parsial (Uji t)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Coefficientsa** | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | -17,710 | 2,093 |  | -8,463 | ,000 |
| NPL | ,129 | ,081 | ,085 | 1,592 | ,113 |
| BOPO | -,059 | ,005 | -,593 | -11,131 | ,000 |
| Firm Size | ,743 | ,066 | ,548 | 11,229 | ,000 |
| a. Dependent Variable: ROA | | | | | | |

1. **Uji Signifikansi Simultan (Uji F)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANOVAa** | | | | | | |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 1624,487 | 3 | 541,496 | 86,398 | ,000b |
| Residual | 1027,865 | 164 | 6,267 |  |  |
| Total | 2652,352 | 167 |  |  |  |
| a. Dependent Variable: ROA | | | | | | |
| b. Predictors: (Constant), NPL, BOPO, Firm Size | | | | | | |

1. **Koefisien Determinasi**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model Summaryb** | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | ,783a | ,612 | ,605 | 2,50349 |
| a. Predictors: (Constant), NPL, BOPO, Firm Size | | | | |
| b. Dependent Variable: ROA | | | | |

Lampiran 4

**Tabel Durbin Watson**

**Tabel Durbin-Watson (DW), α = 5%**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| n | k=1 | | k=2 | | k=3 | | k=4 | | k=5 | |
| dL | dU | dL | dU | dL | dU | dL | dU | dL | dU |
| 120 | 1.6853 | 1.7189 | 1.6684 | 1.7361 | 1.6513 | 1.7536 | 1.6339 | 1.7715 | 1.6164 | 1.7896 |
| 121 | 1.6867 | 1.7200 | 1.6699 | 1.7370 | 1.6529 | 1.7544 | 1.6357 | 1.7721 | 1.6184 | 1.7901 |
| 122 | 1.6880 | 1.7210 | 1.6714 | 1.7379 | 1.6545 | 1.7552 | 1.6375 | 1.7727 | 1.6203 | 1.7905 |
| 123 | 1.6893 | 1.7221 | 1.6728 | 1.7388 | 1.6561 | 1.7559 | 1.6392 | 1.7733 | 1.6222 | 1.7910 |
| 124 | 1.6906 | 1.7231 | 1.6743 | 1.7397 | 1.6577 | 1.7567 | 1.6409 | 1.7739 | 1.6240 | 1.7914 |
| 125 | 1.6919 | 1.7241 | 1.6757 | 1.7406 | 1.6592 | 1.7574 | 1.6426 | 1.7745 | 1.6258 | 1.7919 |
| 126 | 1.6932 | 1.7252 | 1.6771 | 1.7415 | 1.6608 | 1.7582 | 1.6443 | 1.7751 | 1.6276 | 1.7923 |
| 127 | 1.6944 | 1.7261 | 1.6785 | 1.7424 | 1.6623 | 1.7589 | 1.6460 | 1.7757 | 1.6294 | 1.7928 |
| 128 | 1.6957 | 1.7271 | 1.6798 | 1.7432 | 1.6638 | 1.7596 | 1.6476 | 1.7763 | 1.6312 | 1.7932 |
| 129 | 1.6969 | 1.7281 | 1.6812 | 1.7441 | 1.6653 | 1.7603 | 1.6492 | 1.7769 | 1.6329 | 1.7937 |
| 130 | 1.6981 | 1.7291 | 1.6825 | 1.7449 | 1.6667 | 1.7610 | 1.6508 | 1.7774 | 1.6346 | 1.7941 |
| 131 | 1.6993 | 1.7301 | 1.6838 | 1.7458 | 1.6682 | 1.7617 | 1.6523 | 1.7780 | 1.6363 | 1.7945 |
| 132 | 1.7005 | 1.7310 | 1.6851 | 1.7466 | 1.6696 | 1.7624 | 1.6539 | 1.7786 | 1.6380 | 1.7950 |
| 133 | 1.7017 | 1.7319 | 1.6864 | 1.7474 | 1.6710 | 1.7631 | 1.6554 | 1.7791 | 1.6397 | 1.7954 |
| 134 | 1.7028 | 1.7329 | 1.6877 | 1.7482 | 1.6724 | 1.7638 | 1.6569 | 1.7797 | 1.6413 | 1.7958 |
| 135 | 1.7040 | 1.7338 | 1.6889 | 1.7490 | 1.6738 | 1.7645 | 1.6584 | 1.7802 | 1.6429 | 1.7962 |
| 136 | 1.7051 | 1.7347 | 1.6902 | 1.7498 | 1.6751 | 1.7652 | 1.6599 | 1.7808 | 1.6445 | 1.7967 |
| 137 | 1.7062 | 1.7356 | 1.6914 | 1.7506 | 1.6765 | 1.7659 | 1.6613 | 1.7813 | 1.6461 | 1.7971 |
| 138 | 1.7073 | 1.7365 | 1.6926 | 1.7514 | 1.6778 | 1.7665 | 1.6628 | 1.7819 | 1.6476 | 1.7975 |
| 139 | 1.7084 | 1.7374 | 1.6938 | 1.7521 | 1.6791 | 1.7672 | 1.6642 | 1.7824 | 1.6491 | 1.7979 |
| 140 | 1.7095 | 1.7382 | 1.6950 | 1.7529 | 1.6804 | 1.7678 | 1.6656 | 1.7830 | 1.6507 | 1.7984 |
| 141 | 1.7106 | 1.7391 | 1.6962 | 1.7537 | 1.6817 | 1.7685 | 1.6670 | 1.7835 | 1.6522 | 1.7988 |
| 142 | 1.7116 | 1.7400 | 1.6974 | 1.7544 | 1.6829 | 1.7691 | 1.6684 | 1.7840 | 1.6536 | 1.7992 |
| 143 | 1.7127 | 1.7408 | 1.6985 | 1.7552 | 1.6842 | 1.7697 | 1.6697 | 1.7846 | 1.6551 | 1.7996 |
| 144 | 1.7137 | 1.7417 | 1.6996 | 1.7559 | 1.6854 | 1.7704 | 1.6710 | 1.7851 | 1.6565 | 1.8000 |
| 145 | 1.7147 | 1.7425 | 1.7008 | 1.7566 | 1.6866 | 1.7710 | 1.6724 | 1.7856 | 1.6580 | 1.8004 |
| 146 | 1.7157 | 1.7433 | 1.7019 | 1.7574 | 1.6878 | 1.7716 | 1.6737 | 1.7861 | 1.6594 | 1.8008 |
| 147 | 1.7167 | 1.7441 | 1.7030 | 1.7581 | 1.6890 | 1.7722 | 1.6750 | 1.7866 | 1.6608 | 1.8012 |
| 148 | 1.7177 | 1.7449 | 1.7041 | 1.7588 | 1.6902 | 1.7729 | 1.6762 | 1.7871 | 1.6622 | 1.8016 |
| 149 | 1.7187 | 1.7457 | 1.7051 | 1.7595 | 1.6914 | 1.7735 | 1.6775 | 1.7876 | 1.6635 | 1.8020 |
| 150 | 1.7197 | 1.7465 | 1.7062 | 1.7602 | 1.6926 | 1.7741 | 1.6788 | 1.7881 | 1.6649 | 1.8024 |
| 151 | 1.7207 | 1.7473 | 1.7072 | 1.7609 | 1.6937 | 1.7747 | 1.6800 | 1.7886 | 1.6662 | 1.8028 |
| 152 | 1.7216 | 1.7481 | 1.7083 | 1.7616 | 1.6948 | 1.7752 | 1.6812 | 1.7891 | 1.6675 | 1.8032 |
| 153 | 1.7226 | 1.7488 | 1.7093 | 1.7622 | 1.6959 | 1.7758 | 1.6824 | 1.7896 | 1.6688 | 1.8036 |
| 154 | 1.7235 | 1.7496 | 1.7103 | 1.7629 | 1.6971 | 1.7764 | 1.6836 | 1.7901 | 1.6701 | 1.8040 |
| 155 | 1.7244 | 1.7504 | 1.7114 | 1.7636 | 1.6982 | 1.7770 | 1.6848 | 1.7906 | 1.6714 | 1.8044 |
| 156 | 1.7253 | 1.7511 | 1.7123 | 1.7642 | 1.6992 | 1.7776 | 1.6860 | 1.7911 | 1.6727 | 1.8048 |
| 157 | 1.7262 | 1.7519 | 1.7133 | 1.7649 | 1.7003 | 1.7781 | 1.6872 | 1.7915 | 1.6739 | 1.8052 |
| 158 | 1.7271 | 1.7526 | 1.7143 | 1.7656 | 1.7014 | 1.7787 | 1.6883 | 1.7920 | 1.6751 | 1.8055 |
| 159 | 1.7280 | 1.7533 | 1.7153 | 1.7662 | 1.7024 | 1.7792 | 1.6895 | 1.7925 | 1.6764 | 1.8059 |
| 160 | 1.7289 | 1.7541 | 1.7163 | 1.7668 | 1.7035 | 1.7798 | 1.6906 | 1.7930 | 1.6776 | 1.8063 |
| 161 | 1.7298 | 1.7548 | 1.7172 | 1.7675 | 1.7045 | 1.7804 | 1.6917 | 1.7934 | 1.6788 | 1.8067 |
| 162 | 1.7306 | 1.7555 | 1.7182 | 1.7681 | 1.7055 | 1.7809 | 1.6928 | 1.7939 | 1.6800 | 1.8070 |
| 163 | 1.7315 | 1.7562 | 1.7191 | 1.7687 | 1.7066 | 1.7814 | 1.6939 | 1.7943 | 1.6811 | 1.8074 |
| 164 | 1.7324 | 1.7569 | 1.7200 | 1.7693 | 1.7075 | 1.7820 | 1.6950 | 1.7948 | 1.6823 | 1.8078 |
| 165 | 1.7332 | 1.7576 | 1.7209 | 1.7700 | 1.7085 | 1.7825 | 1.6960 | 1.7953 | 1.6834 | 1.8082 |
| 166 | 1.7340 | 1.7582 | 1.7218 | 1.7706 | 1.7095 | 1.7831 | 1.6971 | 1.7957 | 1.6846 | 1.8085 |
| 167 | 1.7348 | 1.7589 | 1.7227 | 1.7712 | 1.7105 | 1.7836 | 1.6982 | 1.7961 | 1.6857 | 1.8089 |
| 168 | 1.7357 | 1.7596 | 1.7236 | 1.7718 | 1.7115 | 1.7841 | 1.6992 | 1.7966 | 1.6868 | 1.8092 |
| 169 | 1.7365 | 1.7603 | 1.7245 | 1.7724 | 1.7124 | 1.7846 | 1.7002 | 1.7970 | 1.6879 | 1.8096 |
| 170 | 1.7373 | 1.7609 | 1.7254 | 1.7730 | 1.7134 | 1.7851 | 1.7012 | 1.7975 | 1.6890 | 1.8100 |
| 171 | 1.7381 | 1.7616 | 1.7262 | 1.7735 | 1.7143 | 1.7856 | 1.7023 | 1.7979 | 1.6901 | 1.8103 |
| 172 | 1.7389 | 1.7622 | 1.7271 | 1.7741 | 1.7152 | 1.7861 | 1.7033 | 1.7983 | 1.6912 | 1.8107 |
| 173 | 1.7396 | 1.7629 | 1.7279 | 1.7747 | 1.7162 | 1.7866 | 1.7042 | 1.7988 | 1.6922 | 1.8110 |
| 174 | 1.7404 | 1.7635 | 1.7288 | 1.7753 | 1.7171 | 1.7872 | 1.7052 | 1.7992 | 1.6933 | 1.8114 |
| 175 | 1.7412 | 1.7642 | 1.7296 | 1.7758 | 1.7180 | 1.7877 | 1.7062 | 1.7996 | 1.6943 | 1.8117 |
| 176 | 1.7420 | 1.7648 | 1.7305 | 1.7764 | 1.7189 | 1.7881 | 1.7072 | 1.8000 | 1.6954 | 1.8121 |
| 177 | 1.7427 | 1.7654 | 1.7313 | 1.7769 | 1.7197 | 1.7886 | 1.7081 | 1.8005 | 1.6964 | 1.8124 |
| 178 | 1.7435 | 1.7660 | 1.7321 | 1.7775 | 1.7206 | 1.7891 | 1.7091 | 1.8009 | 1.6974 | 1.8128 |
| 179 | 1.7442 | 1.7667 | 1.7329 | 1.7780 | 1.7215 | 1.7896 | 1.7100 | 1.8013 | 1.6984 | 1.8131 |
| 180 | 1.7449 | 1.7673 | 1.7337 | 1.7786 | 1.7224 | 1.7901 | 1.7109 | 1.8017 | 1.6994 | 1.8135 |
| 181 | 1.7457 | 1.7679 | 1.7345 | 1.7791 | 1.7232 | 1.7906 | 1.7118 | 1.8021 | 1.7004 | 1.8138 |
| 182 | 1.7464 | 1.7685 | 1.7353 | 1.7797 | 1.7241 | 1.7910 | 1.7128 | 1.8025 | 1.7014 | 1.8141 |
| 183 | 1.7471 | 1.7691 | 1.7360 | 1.7802 | 1.7249 | 1.7915 | 1.7137 | 1.8029 | 1.7023 | 1.8145 |
| 184 | 1.7478 | 1.7697 | 1.7368 | 1.7807 | 1.7257 | 1.7920 | 1.7146 | 1.8033 | 1.7033 | 1.8148 |
| 185 | 1.7485 | 1.7702 | 1.7376 | 1.7813 | 1.7266 | 1.7924 | 1.7155 | 1.8037 | 1.7042 | 1.8151 |
| 186 | 1.7492 | 1.7708 | 1.7384 | 1.7818 | 1.7274 | 1.7929 | 1.7163 | 1.8041 | 1.7052 | 1.8155 |
| 187 | 1.7499 | 1.7714 | 1.7391 | 1.7823 | 1.7282 | 1.7933 | 1.7172 | 1.8045 | 1.7061 | 1.8158 |
| 188 | 1.7506 | 1.7720 | 1.7398 | 1.7828 | 1.7290 | 1.7938 | 1.7181 | 1.8049 | 1.7070 | 1.8161 |
| 189 | 1.7513 | 1.7725 | 1.7406 | 1.7833 | 1.7298 | 1.7942 | 1.7189 | 1.8053 | 1.7080 | 1.8165 |
| 190 | 1.7520 | 1.7731 | 1.7413 | 1.7838 | 1.7306 | 1.7947 | 1.7198 | 1.8057 | 1.7089 | 1.8168 |
| 191 | 1.7526 | 1.7737 | 1.7420 | 1.7843 | 1.7314 | 1.7951 | 1.7206 | 1.8061 | 1.7098 | 1.8171 |
| 192 | 1.7533 | 1.7742 | 1.7428 | 1.7848 | 1.7322 | 1.7956 | 1.7215 | 1.8064 | 1.7107 | 1.8174 |
| 193 | 1.7540 | 1.7748 | 1.7435 | 1.7853 | 1.7329 | 1.7960 | 1.7223 | 1.8068 | 1.7116 | 1.8178 |
| 194 | 1.7546 | 1.7753 | 1.7442 | 1.7858 | 1.7337 | 1.7965 | 1.7231 | 1.8072 | 1.7124 | 1.8181 |
| 195 | 1.7553 | 1.7759 | 1.7449 | 1.7863 | 1.7345 | 1.7969 | 1.7239 | 1.8076 | 1.7133 | 1.8184 |
| 196 | 1.7559 | 1.7764 | 1.7456 | 1.7868 | 1.7352 | 1.7973 | 1.7247 | 1.8079 | 1.7142 | 1.8187 |
| 197 | 1.7566 | 1.7769 | 1.7463 | 1.7873 | 1.7360 | 1.7977 | 1.7255 | 1.8083 | 1.7150 | 1.8190 |
| 198 | 1.7572 | 1.7775 | 1.7470 | 1.7878 | 1.7367 | 1.7982 | 1.7263 | 1.8087 | 1.7159 | 1.8193 |
| 199 | 1.7578 | 1.7780 | 1.7477 | 1.7882 | 1.7374 | 1.7986 | 1.7271 | 1.8091 | 1.7167 | 1.8196 |
| 200 | 1.7584 | 1.7785 | 1.7483 | 1.7887 | 1.7382 | 1.7990 | 1.7279 | 1.8094 | 1.7176 | 1.8199 |

Lampiran 5

**Tabel Uji t**

**Titik Persentase Distribusi t (df = 121-190)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Pr** | **0.25** | **0.10** | **0.05** | **0.025** | **0.01** | **0.005** | **0.001** |
| **df** | **0.50** | **0.20** | **0.10** | **0.050** | **0.02** | **0.010** | **0.002** |
| 121 | 0.67652 | 1.28859 | 1.65754 | 1.97976 | 2.35756 | 2.61707 | 3.15895 |
| 122 | 0.67651 | 1.28853 | 1.65744 | 1.97960 | 2.35730 | 2.61673 | 3.15838 |
| 123 | 0.67649 | 1.28847 | 1.65734 | 1.97944 | 2.35705 | 2.61639 | 3.15781 |
| 124 | 0.67647 | 1.28842 | 1.65723 | 1.97928 | 2.35680 | 2.61606 | 3.15726 |
| 125 | 0.67646 | 1.28836 | 1.65714 | 1.97912 | 2.35655 | 2.61573 | 3.15671 |
| 126 | 0.67644 | 1.28831 | 1.65704 | 1.97897 | 2.35631 | 2.61541 | 3.15617 |
| 127 | 0.67643 | 1.28825 | 1.65694 | 1.97882 | 2.35607 | 2.61510 | 3.15565 |
| 128 | 0.67641 | 1.28820 | 1.65685 | 1.97867 | 2.35583 | 2.61478 | 3.15512 |
| 129 | 0.67640 | 1.28815 | 1.65675 | 1.97852 | 2.35560 | 2.61448 | 3.15461 |
| 130 | 0.67638 | 1.28810 | 1.65666 | 1.97838 | 2.35537 | 2.61418 | 3.15411 |
| 131 | 0.67637 | 1.28805 | 1.65657 | 1.97824 | 2.35515 | 2.61388 | 3.15361 |
| 132 | 0.67635 | 1.28800 | 1.65648 | 1.97810 | 2.35493 | 2.61359 | 3.15312 |
| 133 | 0.67634 | 1.28795 | 1.65639 | 1.97796 | 2.35471 | 2.61330 | 3.15264 |
| 134 | 0.67633 | 1.28790 | 1.65630 | 1.97783 | 2.35450 | 2.61302 | 3.15217 |
| 135 | 0.67631 | 1.28785 | 1.65622 | 1.97769 | 2.35429 | 2.61274 | 3.15170 |
| 136 | 0.67630 | 1.28781 | 1.65613 | 1.97756 | 2.35408 | 2.61246 | 3.15124 |
| 137 | 0.67628 | 1.28776 | 1.65605 | 1.97743 | 2.35387 | 2.61219 | 3.15079 |
| 138 | 0.67627 | 1.28772 | 1.65597 | 1.97730 | 2.35367 | 2.61193 | 3.15034 |
| 139 | 0.67626 | 1.28767 | 1.65589 | 1.97718 | 2.35347 | 2.61166 | 3.14990 |
| 140 | 0.67625 | 1.28763 | 1.65581 | 1.97705 | 2.35328 | 2.61140 | 3.14947 |
| 141 | 0.67623 | 1.28758 | 1.65573 | 1.97693 | 2.35309 | 2.61115 | 3.14904 |
| 142 | 0.67622 | 1.28754 | 1.65566 | 1.97681 | 2.35289 | 2.61090 | 3.14862 |
| 143 | 0.67621 | 1.28750 | 1.65558 | 1.97669 | 2.35271 | 2.61065 | 3.14820 |
| 144 | 0.67620 | 1.28746 | 1.65550 | 1.97658 | 2.35252 | 2.61040 | 3.14779 |
| 145 | 0.67619 | 1.28742 | 1.65543 | 1.97646 | 2.35234 | 2.61016 | 3.14739 |
| 146 | 0.67617 | 1.28738 | 1.65536 | 1.97635 | 2.35216 | 2.60992 | 3.14699 |
| 147 | 0.67616 | 1.28734 | 1.65529 | 1.97623 | 2.35198 | 2.60969 | 3.14660 |
| 148 | 0.67615 | 1.28730 | 1.65521 | 1.97612 | 2.35181 | 2.60946 | 3.14621 |
| 149 | 0.67614 | 1.28726 | 1.65514 | 1.97601 | 2.35163 | 2.60923 | 3.14583 |
| 150 | 0.67613 | 1.28722 | 1.65508 | 1.97591 | 2.35146 | 2.60900 | 3.14545 |
| 151 | 0.67612 | 1.28718 | 1.65501 | 1.97580 | 2.35130 | 2.60878 | 3.14508 |
| 152 | 0.67611 | 1.28715 | 1.65494 | 1.97569 | 2.35113 | 2.60856 | 3.14471 |
| 153 | 0.67610 | 1.28711 | 1.65487 | 1.97559 | 2.35097 | 2.60834 | 3.14435 |
| 154 | 0.67609 | 1.28707 | 1.65481 | 1.97549 | 2.35081 | 2.60813 | 3.14400 |
| 155 | 0.67608 | 1.28704 | 1.65474 | 1.97539 | 2.35065 | 2.60792 | 3.14364 |
| 156 | 0.67607 | 1.28700 | 1.65468 | 1.97529 | 2.35049 | 2.60771 | 3.14330 |
| 157 | 0.67606 | 1.28697 | 1.65462 | 1.97519 | 2.35033 | 2.60751 | 3.14295 |
| 158 | 0.67605 | 1.28693 | 1.65455 | 1.97509 | 2.35018 | 2.60730 | 3.14261 |
| 159 | 0.67604 | 1.28690 | 1.65449 | 1.97500 | 2.35003 | 2.60710 | 3.14228 |
| 160 | 0.67603 | 1.28687 | 1.65443 | 1.97490 | 2.34988 | 2.60691 | 3.14195 |
| 161 | 0.67602 | 1.28683 | 1.65437 | 1.97481 | 2.34973 | 2.60671 | 3.14162 |
| 162 | 0.67601 | 1.28680 | 1.65431 | 1.97472 | 2.34959 | 2.60652 | 3.14130 |
| 163 | 0.67600 | 1.28677 | 1.65426 | 1.97462 | 2.34944 | 2.60633 | 3.14098 |
| 164 | 0.67599 | 1.28673 | 1.65420 | 1.97453 | 2.34930 | 2.60614 | 3.14067 |
| 165 | 0.67598 | 1.28670 | 1.65414 | 1.97445 | 2.34916 | 2.60595 | 3.14036 |
| 166 | 0.67597 | 1.28667 | 1.65408 | 1.97436 | 2.34902 | 2.60577 | 3.14005 |
| 167 | 0.67596 | 1.28664 | 1.65403 | 1.97427 | 2.34888 | 2.60559 | 3.13975 |
| 168 | 0.67595 | 1.28661 | 1.65397 | 1.97419 | 2.34875 | 2.60541 | 3.13945 |
| 169 | 0.67594 | 1.28658 | 1.65392 | 1.97410 | 2.34862 | 2.60523 | 3.13915 |
| 170 | 0.67594 | 1.28655 | 1.65387 | 1.97402 | 2.34848 | 2.60506 | 3.13886 |
| 171 | 0.67593 | 1.28652 | 1.65381 | 1.97393 | 2.34835 | 2.60489 | 3.13857 |
| 172 | 0.67592 | 1.28649 | 1.65376 | 1.97385 | 2.34822 | 2.60471 | 3.13829 |
| 173 | 0.67591 | 1.28646 | 1.65371 | 1.97377 | 2.34810 | 2.60455 | 3.13801 |
| 174 | 0.67590 | 1.28644 | 1.65366 | 1.97369 | 2.34797 | 2.60438 | 3.13773 |
| 175 | 0.67589 | 1.28641 | 1.65361 | 1.97361 | 2.34784 | 2.60421 | 3.13745 |
| 176 | 0.67589 | 1.28638 | 1.65356 | 1.97353 | 2.34772 | 2.60405 | 3.13718 |
| 177 | 0.67588 | 1.28635 | 1.65351 | 1.97346 | 2.34760 | 2.60389 | 3.13691 |
| 178 | 0.67587 | 1.28633 | 1.65346 | 1.97338 | 2.34748 | 2.60373 | 3.13665 |
| 179 | 0.67586 | 1.28630 | 1.65341 | 1.97331 | 2.34736 | 2.60357 | 3.13638 |
| 180 | 0.67586 | 1.28627 | 1.65336 | 1.97323 | 2.34724 | 2.60342 | 3.13612 |
| 181 | 0.67585 | 1.28625 | 1.65332 | 1.97316 | 2.34713 | 2.60326 | 3.13587 |
| 182 | 0.67584 | 1.28622 | 1.65327 | 1.97308 | 2.34701 | 2.60311 | 3.13561 |
| 183 | 0.67583 | 1.28619 | 1.65322 | 1.97301 | 2.34690 | 2.60296 | 3.13536 |
| 184 | 0.67583 | 1.28617 | 1.65318 | 1.97294 | 2.34678 | 2.60281 | 3.13511 |
| 185 | 0.67582 | 1.28614 | 1.65313 | 1.97287 | 2.34667 | 2.60267 | 3.13487 |
| 186 | 0.67581 | 1.28612 | 1.65309 | 1.97280 | 2.34656 | 2.60252 | 3.13463 |
| 187 | 0.67580 | 1.28610 | 1.65304 | 1.97273 | 2.34645 | 2.60238 | 3.13438 |
| 188 | 0.67580 | 1.28607 | 1.65300 | 1.97266 | 2.34635 | 2.60223 | 3.13415 |
| 189 | 0.67579 | 1.28605 | 1.65296 | 1.97260 | 2.34624 | 2.60209 | 3.13391 |
| 190 | 0.67578 | 1.28602 | 1.65291 | 1.97253 | 2.34613 | 2.60195 | 3.13368 |

Lampiran 6

**Tabel Uji F**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **α = 0,05** | **df1= (k-1)** | | | | | | |
| **df2= (n-k-1)** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| 110 | 3.93 | 3.08 | 2.69 | 2.45 | 2.3 | 2.18 | 2.09 |
| 111 | 3.93 | 3.08 | 2.69 | 2.45 | 2.3 | 2.18 | 2.09 |
| 112 | 3.93 | 3.08 | 2.69 | 2.45 | 2.3 | 2.18 | 2.09 |
| 113 | 3.93 | 3.08 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 |
| 114 | 3.92 | 3.08 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 |
| 115 | 3.92 | 3.08 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 |
| 116 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 |
| 117 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 |
| 118 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 |
| 119 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 |
| 120 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.18 | 2.09 |
| 121 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.17 | 2.09 |
| 122 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.17 | 2.09 |
| 123 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.17 | 2.08 |
| 124 | 3.92 | 3.07 | 2.68 | 2.44 | 2.29 | 2.17 | 2.08 |
| 125 | 3.92 | 3.07 | 2.68 | 2.44 | 2.29 | 2.17 | 2.08 |
| 126 | 3.92 | 3.07 | 2.68 | 2.44 | 2.29 | 2.17 | 2.08 |
| 127 | 3.92 | 3.07 | 2.68 | 2.44 | 2.29 | 2.17 | 2.08 |
| 128 | 3.92 | 3.07 | 2.68 | 2.44 | 2.29 | 2.17 | 2.08 |
| 129 | 3.91 | 3.07 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 130 | 3.91 | 3.07 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 131 | 3.91 | 3.07 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 132 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 133 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 134 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 135 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 136 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 137 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.17 | 2.08 |
| 138 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.16 | 2.08 |
| 139 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.16 | 2.08 |
| 140 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.16 | 2.08 |
| 141 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.16 | 2.08 |
| 142 | 3.91 | 3.06 | 2.67 | 2.44 | 2.28 | 2.16 | 2.07 |
| 143 | 3.91 | 3.06 | 2.67 | 2.43 | 2.28 | 2.16 | 2.07 |
| 144 | 3.91 | 3.06 | 2.67 | 2.43 | 2.28 | 2.16 | 2.07 |
| 145 | 3.91 | 3.06 | 2.67 | 2.43 | 2.28 | 2.16 | 2.07 |
| 146 | 3.91 | 3.06 | 2.67 | 2.43 | 2.28 | 2.16 | 2.07 |
| 147 | 3.91 | 3.06 | 2.67 | 2.43 | 2.28 | 2.16 | 2.07 |
| 148 | 3.91 | 3.06 | 2.67 | 2.43 | 2.28 | 2.16 | 2.07 |
| 149 | 3.9 | 3.06 | 2.67 | 2.43 | 2.27 | 2.16 | 2.07 |
| 150 | 3.9 | 3.06 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 151 | 3.9 | 3.06 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 152 | 3.9 | 3.06 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 153 | 3.9 | 3.06 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 154 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 155 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 156 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 157 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 158 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 159 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 160 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 161 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.16 | 2.07 |
| 162 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.15 | 2.07 |
| 163 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.15 | 2.07 |
| 164 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.15 | 2.07 |
| 165 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.15 | 2.07 |
| 166 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.15 | 2.07 |
| 167 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.15 | 2.06 |
| 168 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.15 | 2.06 |
| 169 | 3.9 | 3.05 | 2.66 | 2.43 | 2.27 | 2.15 | 2.06 |
| 170 | 3.9 | 3.05 | 2.66 | 2.42 | 2.27 | 2.15 | 2.06 |
| 171 | 3.9 | 3.05 | 2.66 | 2.42 | 2.27 | 2.15 | 2.06 |
| 172 | 3.9 | 3.05 | 2.66 | 2.42 | 2.27 | 2.15 | 2.06 |
| 173 | 3.9 | 3.05 | 2.66 | 2.42 | 2.27 | 2.15 | 2.06 |
| 174 | 3.9 | 3.05 | 2.66 | 2.42 | 2.27 | 2.15 | 2.06 |
| 175 | 3.9 | 3.05 | 2.66 | 2.42 | 2.27 | 2.15 | 2.06 |
| 176 | 3.89 | 3.05 | 2.66 | 2.42 | 2.27 | 2.15 | 2.06 |
| 177 | 3.89 | 3.05 | 2.66 | 2.42 | 2.27 | 2.15 | 2.06 |
| 178 | 3.89 | 3.05 | 2.66 | 2.42 | 2.26 | 2.15 | 2.06 |
| 179 | 3.89 | 3.05 | 2.66 | 2.42 | 2.26 | 2.15 | 2.06 |
| 180 | 3.89 | 3.05 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 181 | 3.89 | 3.05 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 182 | 3.89 | 3.05 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 183 | 3.89 | 3.05 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 184 | 3.89 | 3.05 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 185 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 186 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 187 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 188 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 189 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 190 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 191 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 192 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 193 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 194 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 195 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 196 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.15 | 2.06 |
| 197 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.14 | 2.06 |
| 198 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.14 | 2.06 |
| 199 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.14 | 2.06 |
| 200 | 3.89 | 3.04 | 2.65 | 2.42 | 2.26 | 2.14 | 2.06 |