

DAFTAR PUSTAKA

- Anisa, F. (2022). *Pengaruh Return On Asset (Roa) Dan Leverage Terhadap Peringkat Obligasi* (Doctoral dissertation, Universitas Komputer Indonesia).
- Damayanti, C. R., Saifun, M. S., & Hikmah, M. (2020). RGEN Bank's Performance and Value: Evidence From Indonesia. *Proceedings of the 2nd Annual International Conference on Business and Public Administration (AICoBPA 2019)*, 154(13), 215–218. <https://www.atlantispress.com/proceedings/aicobpa-19/125946300>
- Hosmer, D., & Lemeshow, S. (1989). *Applied Logistic Regression* Wiley & Sons. New York.
- 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>
- Mumtazah, F., & Purwanto, A. (2020). Analisis Pengaruh Kinerja Keuangan Dan Pengungkapan Lingkungan Terhadap Nilai Perusahaan. *Diponegoro Journal of Accounting*, 9(2), 1–11. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Peraturan Bank Indonesia No. 11/ 25 /PBI/2009. (2009). Peraturan Bank Indonesia No: 11/ 25 /PBI/2009 Tentang Perubahan atas Peraturan Bank Indonesia Nomor 5/8/PBI/2003 Tentang Penerapan Manajemen Risiko Bagi Bank Umum. *Peraturan Bank Indonesia Nomor: 11/ 25 /Pbi/2009*, 28. http://www.bi.go.id/id/peraturan/perbankan/Pages/pbi_112509.aspx
- Prayoga, R. A., Supriyadi, D., & Nurhasanah, N. (2022). Pengaruh BOPO, CAR Dan NPL Terhadap ROA Pada Perbankan BUMN Periode 2015-2021. *Business Innovation and Entrepreneurship Journal*, 4(3), 227–237. <https://doi.org/10.35899/biej.v4i3.378>
- Purnama, S., & Kusumawardhani, A. P. (2022). Deteksi Peluang Gagal Bayar Calon Debitur Menggunakan Algoritma Particle Swarm Optimization (PSO) untuk Meningkatkan Kinerja Manajemen Risiko pada Koperasi Simpan Pinjam ABC. *KUBIK: Jurnal Publikasi Ilmiah Matematika*, 6(2), 71–84. <https://doi.org/10.15575/kubik.v6i2.13835>
- Rahayu, I. P. (2020). *PENGARUH PROFITABILITAS, LIKUIDITAS, LEVERAGE, UMUR OBLIGASI DAN REPUTASI AUDITOR TERHADAP PERINGKAT OBLIGASI (Studi Pada Perusahaan* <http://repository.stie-mce.ac.id/id/eprint/932%0Ahttp://repository.stie-mce.ac.id/932/3/BAB> II TINJAUAN PUSTAKA.pdf
- Sakinah, A. N. (2021). *Analisis Perbandingan Kinerja Keuangan Pt Bank Mandiri (Persero) Tbk Sebelum Dan Pada Masa Pandemi Covid–19* (Doctoral dissertation, UNIVERSITAS BOSOWA).
- Syahrir, D. K., Ickhsanto Wahyudi, Santi Susanti, Darwant, D., & Ibnu Qizam. (2023). Manajemen Risiko Perbankan Syariah. *AKUA: Jurnal Akuntansi Dan Keuangan*, 2(1), 58–64. <https://doi.org/10.54259/akua.v2i1.1382>

LAMPIRAN

Lampiran 1. Kuesioner

KUESIONER ANALISIS RISIKO KREDIT

Judul Penelitian:

Analisis Risiko Kredit pada Bank Mandiri Menggunakan Metode Peringkat Kredit

Nama Nasabah: _____

Petunjuk:

Silakan isi setiap pertanyaan dengan informasi yang sesuai. Tuliskan angka atau pilih jawaban yang paling tepat sesuai kondisi Anda.

1. Usia

Berapa usia Anda saat ini?

Jawaban: _____

2. Tanggungan Keluarga

Berapa jumlah anggota keluarga yang menjadi tanggungan finansial Anda?

Jawaban: _____

3. Jumlah Tabungan

Berapa total tabungan Anda saat ini? (dalam Rupiah)

Jawaban: _____

4. Nilai Jaminan

Berapa nilai perkiraan dari aset yang Anda miliki sebagai jaminan? (dalam Rupiah)

Jawaban: _____

5. Pendapatan Perbulan

Berapa pendapatan kotor Anda setiap bulan? (dalam Rupiah)

Jawaban: _____

6. Jumlah Kredit Diajukan

Berapa jumlah kredit yang Anda ajukan? (dalam Rupiah)

Jawaban: _____

7. THP (Take Home Pay)

Berapa gaji bersih Anda setiap bulan setelah dipotong pajak dan kewajiban lainnya? (dalam Rupiah)

Jawaban: _____

8. Waktu Pinjaman

Berapa lama jangka waktu pinjaman yang Anda inginkan? (dalam bulan)

Jawaban: _____

9. Gagal Bayar

Apakah Anda pernah mengalami kredit macet/gagal bayar kredit sebelumnya?

Pilihan Jawaban: [] Ya [] Tidak

Lampiran 2. Data Calin Debitur

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	Y
63	3	Rp 30.793.794	Rp 250.088.620	Rp 2.579.252	Rp 200.000.000	Rp 1.220.400	34	0
55	5	Rp 19.315.158	Rp 242.132.724	Rp 8.438.099	Rp 400.000.000	Rp 7.084.700	42	1
61	1	Rp 41.370.467	Rp 92.053.123	Rp 5.458.703	Rp 220.000.000	Rp 4.110.300	42	0
58	3	Rp 20.464.008	Rp 251.523.352	Rp 8.458.703	Rp 350.000.000	Rp 9.110.300	56	1
26	4	Rp 28.555.602	Rp 11.839.815	Rp 8.458.703	Rp 200.000.000	Rp 9.110.300	34	0
35	4	Rp 48.518.300	Rp 53.041.763	Rp 14.458.703	Rp 350.000.000	Rp 14.110.300	35	0
25	2	Rp 25.918.604	Rp 12.848.157	Rp 23.775.002	Rp 120.000.000	Rp 23.463.600	32	0
59	3	Rp 21.123.021	Rp 253.782.280	Rp 5.319.717	Rp 300.000.000	Rp 4.976.600	49	1
27	3	Rp 28.995.819	Rp 75.675.493	Rp 3.319.717	Rp 240.000.000	Rp 2.976.600	32	0
57	2	Rp 27.777.807	Rp 41.242.735	Rp 8.310.329	Rp 400.000.000	Rp 9.333.200	43	1
29	2	Rp 10.650.025	Rp 63.308.465	Rp 8.069.307	Rp 240.000.000	Rp 8.162.500	52	0
57	2	Rp 29.716.871	Rp 14.719.437	Rp 16.919.656	Rp 200.000.000	Rp 15.993.800	36	1
25	4	Rp 24.453.178	Rp 84.400.825	Rp 3.677.786	Rp 250.000.000	Rp 2.829.200	45	0
28	4	Rp 20.686.547	Rp 16.518.053	Rp 1.414.183	Rp 100.000.000	Rp 1.358.800	44	0
58	3	Rp 53.079.916	Rp 251.160.871	Rp 8.270.433	Rp 400.000.000	Rp 9.464.000	52	1
34	4	Rp 47.414.536	Rp 138.923.261	Rp 9.559.995	Rp 200.000.000	Rp 9.135.400	33	0
24	3	Rp 3.168.385	Rp 12.890.148	Rp 5.313.885	Rp 250.000.000	Rp 4.679.100	24	0
56	4	Rp 26.023.866	Rp 64.982.301	Rp 6.006.005	Rp 350.000.000	Rp 7.391.600	46	1
37	7	Rp 1.556.158	Rp 13.103.925	Rp 17.313.885	Rp 120.000.000	Rp 16.679.100	33	0
33	3	Rp 51.784.028	Rp 52.655.923	Rp 26.259.929	Rp 90.000.000	Rp 25.459.800	33	0
25	4	Rp 1.120.979	Rp 90.539.946	Rp 6.255.743	Rp 250.000.000	Rp 5.618.500	46	0
58	2	Rp 47.330.324	Rp 67.806.245	Rp 6.265.377	Rp 300.000.000	Rp 8.637.000	38	1

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	Y
28	2	Rp 4.396.138	Rp 13.360.387	Rp 16.238.519	Rp 70.000.000	Rp 15.713.300	36	0
59	4	Rp 20.793.794	Rp 14.088.620	Rp 7.986.561	Rp 400.000.000	Rp 7.395.000	35	1
30	3	Rp 39.315.158	Rp 52.132.724	Rp 14.012.036	Rp 350.000.000	Rp 13.504.400	36	0
25	1	Rp 1.370.467	Rp 32.053.123	Rp 16.880.000	Rp 150.000.000	Rp 15.880.000	34	0
33	4	Rp 40.464.008	Rp 31.523.352	Rp 6.006.005	Rp 400.000.000	Rp 8.758.800	37	1
22	1	Rp 3.555.602	Rp 31.839.815	Rp 24.313.885	Rp 130.000.000	Rp 22.464.000	49	0
37	2	Rp 38.518.300	Rp 33.041.763	Rp 8.259.929	Rp 180.000.000	Rp 8.135.400	39	0
36	4	Rp 25.918.604	Rp 72.848.157	Rp 7.255.743	Rp 250.000.000	Rp 8.679.100	31	1
42	4	Rp 11.123.021	Rp 253.782.280	Rp 9.265.377	Rp 240.000.000	Rp 9.250.000	35	0
43	4	Rp 38.995.819	Rp 35.675.493	Rp 9.600.000	Rp 400.000.000	Rp 9.600.000	29	1
27	2	Rp 2.777.807	Rp 151.242.735	Rp 12.579.252	Rp 150.000.000	Rp 14.110.300	45	0
58	5	Rp 50.650.025	Rp 259.308.465	Rp 7.438.099	Rp 400.000.000	Rp 6.110.300	42	1
35	3	Rp 49.716.871	Rp 60.719.437	Rp 7.458.703	Rp 250.000.000	Rp 7.110.300	34	0
46	3	Rp 44.453.178	Rp 144.400.825	Rp 8.458.703	Rp 240.000.000	Rp 8.110.300	28	0
31	4	Rp 10.686.547	Rp 26.518.053	Rp 7.458.703	Rp 160.000.000	Rp 7.463.600	52	1
58	3	Rp 13.079.916	Rp 131.160.871	Rp 24.458.703	Rp 250.000.000	Rp 24.976.600	52	0
38	4	Rp 47.414.536	Rp 58.923.261	Rp 8.775.002	Rp 300.000.000	Rp 9.976.600	33	1
55	4	Rp 2.168.385	Rp 62.890.148	Rp 9.319.717	Rp 250.000.000	Rp 9.333.200	20	0
59	5	Rp 16.023.866	Rp 48.982.301	Rp 9.319.717	Rp 250.000.000	Rp 11.162.500	40	1
60	5	Rp 1.556.158	Rp 30.103.925	Rp 28.310.329	Rp 150.000.000	Rp 25.993.800	32	1
41	3	Rp 1.784.028	Rp 82.655.923	Rp 14.069.307	Rp 250.000.000	Rp 15.229.200	31	0
31	2	Rp 21.120.979	Rp 40.539.946	Rp 9.919.656	Rp 150.000.000	Rp 9.758.800	31	0
57	5	Rp 7.330.324	Rp 77.806.245	Rp 6.677.786	Rp 300.000.000	Rp 7.464.000	32	1

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	Y
59	4	Rp 34.396.138	Rp 33.360.387	Rp 7.414.183	Rp 260.000.000	Rp 9.535.400	46	1
36	3	Rp 30.793.794	Rp 140.088.620	Rp 8.270.433	Rp 60.000.000	Rp 9.214.924	20	0
32	2	Rp 9.315.158	Rp 142.132.724	Rp 10.159.995	Rp 150.000.000	Rp 11.856.058	43	0
39	3	Rp 11.370.467	Rp 32.053.123	Rp 7.270.764	Rp 150.000.000	Rp 8.222.364	24	0
52	5	Rp 7.464.008	Rp 61.523.352	Rp 13.280.743	Rp 250.000.000	Rp 11.157.422	45	1
30	3	Rp 8.555.602	Rp 31.839.815	Rp 8.455.593	Rp 120.000.000	Rp 9.215.852	30	0
31	3	Rp 48.518.300	Rp 53.041.763	Rp 8.048.737	Rp 230.000.000	Rp 9.663.874	58	1
33	4	Rp 25.918.604	Rp 182.848.157	Rp 8.582.453	Rp 220.000.000	Rp 9.540.754	34	0
47	4	Rp 2.123.021	Rp 33.782.280	Rp 8.348.954	Rp 160.000.000	Rp 7.951.187	45	1
36	3	Rp 18.995.819	Rp 15.675.493	Rp 1.923.953	Rp 200.000.000	Rp 433.758	24	0
24	3	Rp 2.342.807	Rp 11.242.735	Rp 11.418.195	Rp 80.000.000	Rp 11.309.010	31	0
51	4	Rp 10.650.025	Rp 139.308.465	Rp 4.230.175	Rp 300.000.000	Rp 3.250.786	28	1
45	3	Rp 2.716.871	Rp 10.719.437	Rp 8.600.148	Rp 190.000.000	Rp 8.951.467	26	0
49	4	Rp 14.453.178	Rp 64.400.825	Rp 5.285.251	Rp 230.000.000	Rp 4.707.186	24	0
32	5	Rp 6.686.547	Rp 72.518.053	Rp 7.130.141	Rp 220.000.000	Rp 6.521.162	41	0
39	5	Rp 9.079.916	Rp 131.160.871	Rp 13.349.688	Rp 210.000.000	Rp 11.841.171	53	0
38	4	Rp 7.414.536	Rp 68.923.261	Rp 6.433.346	Rp 210.000.000	Rp 5.687.847	35	0
23	4	Rp 2.168.385	Rp 12.890.148	Rp 5.064.850	Rp 130.000.000	Rp 4.530.548	34	0
30	2	Rp 16.023.866	Rp 58.982.301	Rp 8.424.140	Rp 210.000.000	Rp 9.887.339	49	0
24	3	Rp 7.556.158	Rp 13.103.925	Rp 3.494.134	Rp 130.000.000	Rp 3.322.002	30	0
34	4	Rp 41.784.028	Rp 41.655.923	Rp 7.523.713	Rp 190.000.000	Rp 9.839.873	36	0
36	4	Rp 5.120.979	Rp 10.539.946	Rp 5.279.368	Rp 200.000.000	Rp 4.426.928	28	0
55	3	Rp 57.330.324	Rp 47.806.245	Rp 7.227.065	Rp 280.000.000	Rp 9.404.481	58	1

X_1	X_2	X_3		X_4		X_5		X_6		X_7		X_8	Y
28	3	Rp	4.396.138	Rp	13.360.387	Rp	9.805.068	Rp	260.000.000	Rp	8.725.291	52	0

Lampiran 3. Data Calon Debitur yang Dikelompokkan

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	Y
63	3	3	7	12	20	13	34	0
55	5	2	6	6	28	7	42	1
61	1	7	4	9	22	10	42	0
58	3	5	7	6	27	5	56	1
26	4	1	1	6	20	5	34	0
35	4	1	3	4	27	4	35	0
25	2	1	1	2	12	2	32	0
59	3	5	7	9	26	10	49	1
27	3	1	4	11	24	12	32	0
57	2	1	2	6	28	5	43	1
29	2	2	3	6	24	6	52	0
57	2	1	1	3	20	3	36	1
25	4	5	4	11	25	12	45	0
28	4	3	1	13	10	13	44	0
58	3	7	6	6	28	5	52	1
34	4	6	5	5	20	5	33	0
24	3	1	1	9	25	10	24	0
56	4	4	3	8	27	7	46	1
37	7	1	1	3	12	3	33	0
33	3	7	3	1	9	1	33	0
25	4	1	4	8	25	9	46	0
58	2	6	3	8	26	6	38	1
28	2	1	1	3	7	3	36	0
59	4	4	3	7	28	7	35	1
30	3	5	3	4	27	4	36	0
25	1	1	2	3	15	3	34	0
33	4	6	2	8	28	6	37	1
22	1	1	2	2	13	2	49	0
37	2	5	2	6	18	6	39	0
36	4	4	3	7	25	6	31	1
42	4	3	6	5	24	5	35	0
43	4	5	2	5	28	5	29	1
27	2	1	5	4	15	4	45	0
58	5	7	7	7	28	8	42	1
35	3	6	3	7	25	7	34	0
46	3	6	5	6	24	6	28	0

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	Y
31	4	3	2	7	16	7	52	1
58	3	3	5	2	25	2	52	0
38	4	6	3	6	26	5	33	1
55	4	1	3	5	25	5	20	0
59	5	3	3	5	25	4	40	1
60	5	1	2	1	15	1	32	1
41	3	1	4	3	25	3	31	0
31	2	4	2	5	15	5	31	0
57	5	2	3	8	26	7	32	1
59	4	5	2	7	26	5	46	1
36	3	5	5	6	6	5	20	0
32	2	2	5	4	15	4	43	0
39	3	3	2	7	15	6	24	0
52	5	2	3	4	25	4	45	1
30	3	2	2	6	12	5	30	0
31	3	6	3	6	23	5	58	1
33	4	4	6	6	22	5	34	0
47	4	1	2	6	16	7	45	1
36	3	3	1	13	20	15	24	0
24	3	1	1	4	8	4	31	0
51	4	3	5	10	26	11	28	1
45	3	1	1	6	19	6	26	0
49	4	3	3	9	23	10	24	0
32	5	2	3	7	22	8	41	0
39	5	2	5	4	21	4	53	0
38	4	2	3	8	21	9	35	0
23	4	1	1	9	13	10	34	0
30	2	3	3	6	21	5	49	0
24	3	2	1	11	13	11	30	0
34	4	6	2	7	19	5	36	0
36	4	2	1	9	20	10	28	0
55	3	7	3	7	28	5	58	1
28	3	1	1	5	26	6	52	0

Lampiran 4. Data Calon Debitur Dalam Bentuk Z-Score

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
1,77348	-0,35116	-0,08541	2,2383	2,13355	-0,16263	2,24671	-0,40767
1,14715	1,44367	-0,57654	1,66417	-0,11401	1,15756	0,25924	0,45124
1,6169	-2,14599	1,87911	0,51589	1,00977	0,16742	1,25297	0,45124
1,38202	-0,35116	0,89685	2,2383	-0,11401	0,99253	-0,40326	1,95434
-1,12332	0,54625	-1,06767	-1,20652	-0,11401	-0,16263	-0,40326	-0,40767
-0,41869	0,54625	-1,06767	-0,05825	-0,86319	0,99253	-0,7345	-0,30031
-1,20161	-1,24858	-1,06767	-1,20652	-1,61238	-1,48282	-1,39699	-0,6224
1,46032	-0,35116	0,89685	2,2383	1,00977	0,82751	1,25297	1,20279
-1,04503	-0,35116	-1,06767	0,51589	1,75896	0,49746	1,91546	-0,6224
1,30373	-1,24858	-1,06767	-0,63238	-0,11401	1,15756	-0,40326	0,5586
-0,88844	-1,24858	-0,57654	-0,05825	-0,11401	0,49746	-0,07201	1,52488
1,30373	-1,24858	-1,06767	-1,20652	-1,23778	-0,16263	-1,06575	-0,19294
-1,20161	0,54625	0,89685	0,51589	1,75896	0,66249	1,91546	0,77333
-0,96674	0,54625	-0,08541	-1,20652	2,50814	-1,81287	2,24671	0,66597
1,38202	-0,35116	1,87911	1,66417	-0,11401	1,15756	-0,40326	1,52488
-0,49698	0,54625	1,38798	1,09003	-0,4886	-0,16263	-0,40326	-0,51504
-1,2799	-0,35116	-1,06767	-1,20652	1,00977	0,66249	1,25297	-1,48131
1,22544	0,54625	0,40572	-0,05825	0,63518	0,99253	0,25924	0,8807
-0,26211	3,2385	-1,06767	-1,20652	-1,23778	-1,48282	-1,06575	-0,51504
-0,57528	-0,35116	1,87911	-0,05825	-1,98697	-1,97789	-1,72824	-0,51504
-1,20161	0,54625	-1,06767	0,51589	0,63518	0,66249	0,92173	0,8807
1,38202	-1,24858	1,38798	-0,05825	0,63518	0,82751	-0,07201	0,02178

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
-0,96674	-1,24858	-1,06767	-1,20652	-1,23778	-2,30794	-1,06575	-0,19294
1,46032	0,54625	0,40572	-0,05825	0,26059	1,15756	0,25924	-0,30031
-0,81015	-0,35116	0,89685	-0,05825	-0,86319	0,99253	-0,7345	-0,19294
-1,20161	-2,14599	-1,06767	-0,63238	-1,23778	-0,98775	-1,06575	-0,40767
-0,57528	0,54625	1,38798	-0,63238	0,63518	1,15756	-0,07201	-0,08558
-1,43649	-2,14599	-1,06767	-0,63238	-1,61238	-1,3178	-1,39699	1,20279
-0,26211	-1,24858	0,89685	-0,63238	-0,11401	-0,49268	-0,07201	0,12915
-0,3404	0,54625	0,40572	-0,05825	0,26059	0,66249	-0,07201	-0,72977
0,12935	0,54625	-0,08541	1,66417	-0,4886	0,49746	-0,40326	-0,30031
0,20764	0,54625	0,89685	-0,63238	-0,4886	1,15756	-0,40326	-0,94449
-1,04503	-1,24858	-1,06767	1,09003	-0,86319	-0,98775	-0,7345	0,77333
1,38202	1,44367	1,87911	2,2383	0,26059	1,15756	0,59048	0,45124
-0,41869	-0,35116	1,38798	-0,05825	0,26059	0,66249	0,25924	-0,40767
0,44252	-0,35116	1,38798	1,09003	-0,11401	0,49746	-0,07201	-1,05186
-0,73186	0,54625	-0,08541	-0,63238	0,26059	-0,82273	0,25924	1,52488
1,38202	-0,35116	-0,08541	1,09003	-1,61238	0,66249	-1,39699	1,52488
-0,18382	0,54625	1,38798	-0,05825	-0,11401	0,82751	-0,40326	-0,51504
1,14715	0,54625	-1,06767	-0,05825	-0,4886	0,66249	-0,40326	-1,91077
1,46032	1,44367	-0,08541	-0,05825	-0,4886	0,66249	-0,7345	0,23651
1,53861	1,44367	-1,06767	-0,63238	-1,98697	-0,98775	-1,72824	-0,6224
0,05106	-0,35116	-1,06767	0,51589	-1,23778	0,66249	-1,06575	-0,72977
-0,73186	-1,24858	0,40572	-0,63238	-0,4886	-0,98775	-0,40326	-0,72977
1,30373	1,44367	-0,57654	-0,05825	0,63518	0,82751	0,25924	-0,6224

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
1,46032	0,54625	0,89685	-0,63238	0,26059	0,82751	-0,40326	0,8807
-0,3404	-0,35116	0,89685	1,09003	-0,11401	-2,47296	-0,40326	-1,91077
-0,65357	-1,24858	-0,57654	1,09003	-0,86319	-0,98775	-0,7345	0,5586
-0,10552	-0,35116	-0,08541	-0,63238	0,26059	-0,98775	-0,07201	-1,48131
0,91227	1,44367	-0,57654	-0,05825	-0,86319	0,66249	-0,7345	0,77333
-0,81015	-0,35116	-0,57654	-0,63238	-0,11401	-1,48282	-0,40326	-0,83713
-0,73186	-0,35116	1,38798	-0,05825	-0,11401	0,33244	-0,40326	2,16907
-0,57528	0,54625	0,40572	1,66417	-0,11401	0,16742	-0,40326	-0,40767
0,52081	0,54625	-1,06767	-0,63238	-0,11401	-0,82273	0,25924	0,77333
-0,3404	-0,35116	-0,08541	-1,20652	2,50814	-0,16263	2,9092	-1,48131
-1,2799	-0,35116	-1,06767	-1,20652	-0,86319	-2,14292	-0,7345	-0,72977
0,83398	0,54625	-0,08541	1,09003	1,38436	0,82751	1,58422	-1,05186
0,36423	-0,35116	-1,06767	-1,20652	-0,11401	-0,32766	-0,07201	-1,26659
0,6774	0,54625	-0,08541	-0,05825	1,00977	0,33244	1,25297	-1,48131
-0,65357	1,44367	-0,57654	-0,05825	0,26059	0,16742	0,59048	0,34388
-0,10552	1,44367	-0,57654	1,09003	-0,86319	0,00239	-0,7345	1,63225
-0,18382	0,54625	-0,57654	-0,05825	0,63518	0,00239	0,92173	-0,30031
-1,3582	0,54625	-1,06767	-1,20652	1,00977	-1,3178	1,25297	-0,40767
-0,81015	-1,24858	-0,08541	-0,05825	-0,11401	0,00239	-0,40326	1,20279
-1,2799	-0,35116	-0,57654	-1,20652	1,75896	-1,3178	1,58422	-0,83713
-0,49698	0,54625	1,38798	-0,63238	0,26059	-0,32766	-0,40326	-0,19294
-0,3404	0,54625	-0,57654	-1,20652	1,00977	-0,16263	1,25297	-1,05186
1,14715	-0,35116	1,87911	-0,05825	0,26059	1,15756	-0,40326	2,16907

X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
-0,96674	-0,35116	-1,06767	-1,20652	-0,4886	0,82751	-0,07201	1,52488

Lampiran 5. Tabel Chi Square

Chi-squared distribution table

DF	P										
	0.995	0.975	0.20	0.10	0.05	0.025	0.02	0.01	0.005	0.002	0.001
1	0.00003930	0.000982	1.642	2.706	3.841	5.024	5.412	6.635	7.879	9.550	10.828
2	0.0100	0.0506	3.219	4.605	5.991	7.378	7.824	9.210	10.597	12.429	13.816
3	0.0717	0.216	4.642	6.251	7.815	9.348	9.837	11.345	12.838	14.796	16.266
4	0.207	0.484	5.989	7.779	9.488	11.143	11.668	13.277	14.860	16.924	18.467
5	0.412	0.831	7.289	9.236	11.070	12.833	13.388	15.086	16.750	18.907	20.515
6	0.676	1.237	8.558	10.645	12.592	14.449	15.033	16.812	18.548	20.791	22.458
7	0.989	1.690	9.803	12.017	14.067	16.013	16.622	18.475	20.278	22.601	24.322
8	1.344	2.180	11.030	13.362	15.507	17.535	18.168	20.090	21.955	24.352	26.124
9	1.735	2.700	12.242	14.684	16.919	19.023	19.679	21.666	23.589	26.056	27.877
10	2.156	3.247	13.442	15.987	18.307	20.483	21.161	23.209	25.188	27.722	29.588
11	2.603	3.816	14.631	17.275	19.675	21.920	22.618	24.725	26.757	29.354	31.264
12	3.074	4.404	15.812	18.549	21.026	23.337	24.054	26.217	28.300	30.957	32.909
13	3.565	5.009	16.985	19.812	22.362	24.736	25.472	27.688	29.819	32.535	34.528
14	4.075	5.629	18.151	21.064	23.685	26.119	26.873	29.141	31.319	34.091	36.123
15	4.601	6.262	19.311	22.307	24.996	27.488	28.259	30.578	32.801	35.628	37.697
16	5.142	6.908	20.465	23.542	26.296	28.845	29.633	32.000	34.267	37.146	39.252
17	5.697	7.564	21.615	24.769	27.587	30.191	30.995	33.409	35.718	38.648	40.790
18	6.265	8.231	22.760	25.989	28.869	31.526	32.346	34.805	37.156	40.136	42.312
19	6.844	8.907	23.900	27.204	30.144	32.852	33.687	36.191	38.582	41.610	43.820
20	7.434	9.591	25.038	28.412	31.410	34.170	35.020	37.566	39.997	43.072	45.315
21	8.034	10.283	26.171	29.615	32.671	35.479	36.343	38.932	41.401	44.522	46.797
22	8.643	10.982	27.301	30.813	33.924	36.781	37.659	40.289	42.796	45.962	48.268
23	9.260	11.689	28.429	32.007	35.172	38.076	38.968	41.638	44.181	47.391	49.728
24	9.886	12.401	29.553	33.196	36.415	39.364	40.270	42.980	45.559	48.812	51.179
25	10.520	13.120	30.675	34.382	37.652	40.646	41.566	44.314	46.928	50.223	52.620
26	11.160	13.844	31.795	35.563	38.885	41.923	42.856	45.642	48.290	51.627	54.052
27	11.808	14.573	32.912	36.741	40.113	43.195	44.140	46.963	49.645	53.023	55.476
28	12.461	15.308	34.027	37.916	41.337	44.461	45.419	48.278	50.993	54.411	56.892
29	13.121	16.047	35.139	39.087	42.557	45.722	46.693	49.588	52.336	55.792	58.301
30	13.787	16.791	36.250	40.256	43.773	46.979	47.962	50.892	53.672	57.167	59.703
31	14.458	17.539	37.359	41.422	44.985	48.232	49.226	52.191	55.003	58.536	61.098
32	15.134	18.291	38.466	42.585	46.194	49.480	50.487	53.486	56.328	59.899	62.487
33	15.815	19.047	39.572	43.745	47.400	50.725	51.743	54.776	57.648	61.256	63.870
34	16.501	19.806	40.676	44.903	48.602	51.966	52.995	56.061	58.964	62.608	65.247
35	17.192	20.569	41.778	46.059	49.802	53.203	54.244	57.342	60.275	63.955	66.619
36	17.887	21.336	42.879	47.212	50.998	54.437	55.489	58.619	61.581	65.296	67.985
37	18.586	22.106	43.978	48.363	52.192	55.668	56.730	59.893	62.883	66.633	69.346
38	19.289	22.878	45.076	49.513	53.384	56.896	57.969	61.162	64.181	67.966	70.703
39	19.996	23.654	46.173	50.660	54.572	58.120	59.204	62.428	65.476	69.294	72.055
40	20.707	24.433	47.269	51.805	55.758	59.342	60.436	63.691	66.766	70.618	73.402

41	21.421	25.215	48.363	52.949	56.942	60.561	61.665	64.950	68.053	71.938	74.745
42	22.138	25.999	49.456	54.090	58.124	61.777	62.892	66.206	69.336	73.254	76.084
43	22.859	26.785	50.548	55.230	59.304	62.990	64.116	67.459	70.616	74.566	77.419
44	23.584	27.575	51.639	56.369	60.481	64.201	65.337	68.710	71.893	75.874	78.750
45	24.311	28.366	52.729	57.505	61.656	65.410	66.555	69.957	73.166	77.179	80.077
46	25.041	29.160	53.818	58.641	62.830	66.617	67.771	71.201	74.437	78.481	81.400
47	25.775	29.956	54.906	59.774	64.001	67.821	68.985	72.443	75.704	79.780	82.720
48	26.511	30.755	55.993	60.907	65.171	69.023	70.197	73.683	76.969	81.075	84.037
49	27.249	31.555	57.079	62.038	66.339	70.222	71.406	74.919	78.231	82.367	85.351
50	27.991	32.357	58.164	63.167	67.505	71.420	72.613	76.154	79.490	83.657	86.661
51	28.735	33.162	59.248	64.295	68.669	72.616	73.818	77.386	80.747	84.943	87.968
52	29.481	33.968	60.332	65.422	69.832	73.810	75.021	78.616	82.001	86.227	89.272
53	30.230	34.776	61.414	66.548	70.993	75.002	76.223	79.843	83.253	87.507	90.573
54	30.981	35.586	62.496	67.673	72.153	76.192	77.422	81.069	84.502	88.786	91.872
55	31.735	36.398	63.577	68.796	73.311	77.380	78.619	82.292	85.749	90.061	93.168
56	32.490	37.212	64.658	69.919	74.468	78.567	79.815	83.513	86.994	91.335	94.461
57	33.248	38.027	65.737	71.040	75.624	79.752	81.009	84.733	88.236	92.605	95.751
58	34.008	38.844	66.816	72.160	76.778	80.936	82.201	85.950	89.477	93.874	97.039
59	34.770	39.662	67.894	73.279	77.931	82.117	83.391	87.166	90.715	95.140	98.324
60	35.534	40.482	68.972	74.397	79.082	83.298	84.580	88.379	91.952	96.404	99.607
61	36.301	41.303	70.049	75.514	80.232	84.476	85.767	89.591	93.186	97.665	100.888
62	37.068	42.126	71.125	76.630	81.381	85.654	86.953	90.802	94.419	98.925	102.166
63	37.838	42.950	72.201	77.745	82.529	86.830	88.137	92.010	95.649	100.182	103.442
64	38.610	43.776	73.276	78.860	83.675	88.004	89.320	93.217	96.878	101.437	104.716
65	39.383	44.603	74.351	79.973	84.821	89.177	90.501	94.422	98.105	102.691	105.988
66	40.158	45.431	75.424	81.085	85.965	90.349	91.681	95.626	99.330	103.942	107.258
67	40.935	46.261	76.498	82.197	87.108	91.519	92.860	96.828	100.554	105.192	108.526
68	41.713	47.092	77.571	83.308	88.250	92.689	94.037	98.028	101.776	106.440	109.791
69	42.494	47.924	78.643	84.418	89.391	93.856	95.213	99.228	102.996	107.685	111.055
70	43.275	48.758	79.715	85.527	90.531	95.023	96.388	100.425	104.215	108.929	112.317
71	44.058	49.592	80.786	86.635	91.670	96.189	97.561	101.621	105.432	110.172	113.577
72	44.843	50.428	81.857	87.743	92.808	97.353	98.733	102.816	106.648	111.412	114.835
73	45.629	51.265	82.927	88.850	93.945	98.516	99.904	104.010	107.862	112.651	116.092
74	46.417	52.103	83.997	89.956	95.081	99.678	101.074	105.202	109.074	113.889	117.346
75	47.206	52.942	85.066	91.061	96.217	100.839	102.243	106.393	110.286	115.125	118.599
76	47.997	53.782	86.135	92.166	97.351	101.999	103.410	107.583	111.495	116.359	119.850
77	48.788	54.623	87.203	93.270	98.484	103.158	104.576	108.771	112.704	117.591	121.100
78	49.582	55.466	88.271	94.374	99.617	104.316	105.742	109.958	113.911	118.823	122.348
79	50.376	56.309	89.338	95.476	100.749	105.473	106.906	111.144	115.117	120.052	123.594
80	51.172	57.153	90.405	96.578	101.879	106.629	108.069	112.329	116.321	121.280	124.839
81	51.969	57.998	91.472	97.680	103.010	107.783	109.232	113.512	117.524	122.507	126.083
82	52.767	58.845	92.538	98.780	104.139	108.937	110.393	114.695	118.726	123.733	127.324
83	53.567	59.692	93.604	99.880	105.267	110.090	111.553	115.876	119.927	124.957	128.565
84	54.368	60.540	94.669	100.980	106.395	111.242	112.712	117.057	121.126	126.179	129.804
85	55.170	61.389	95.734	102.079	107.522	112.393	113.871	118.236	122.325	127.401	131.041