

BAB V

PENUTUP

A. Kesimpulan

Berdasarkan hasil analisis penelitian dan pembahasan mengenai prediksi kebangkrutan dengan metode Altman, Zmijewski, dan Grover pada BPRS di Jawa Timur periode 2022-2024 maka diperoleh hasil penelitian sebagai berikut:

1. Hasil prediksi kebangkrutan pada BPRS di Jawa Timur periode 2022-2024 setelah dianalisis menggunakan metode Altman, Zmijewski, dan Grover

Pada tahun 2022, hasil prediksi dengan metode Altman terdapat 11 BPRS yang mengalami kondisi gray area dan 8 BPRS mengalami kebangkrutan. Pada metode Zmijewski terdapat 14 BPRS yang mengalami bangkrut. Sedangkan pada metode Grover terdapat 2 BPRS yang mengalami bangkrut.

Pada tahun 2023, hasil prediksi dengan metode Altman terdapat 11 BPRS yang berada di kondisi gray area dan 7 BPRS mengalami kebangkrutan. Pada metode Zmijewski terdapat 14 BPRS yang mengalami kebangkrutan. Sedangkan pada metode Grover hanya 1 BPRS yang mengalami kebangkrutan.

Pada tahun 2024, hasil prediksi dengan metode Altman terdapat 12 BPRS yang berada di kondisi gray area dan 8 BPRS mengalami kebangkrutan. Pada metode Zmijewski terdapat 16 BPRS yang

mengalami kebangkrutan. Sedangkan pada metode Grover hanya 1 BPRS yang mengalami kebangkrutan.

2. Perbedaan signifikan antara hasil prediksi kebangkrutan dengan metode Altman, Zmijewski, dan Grover pada BPRS di Jawa Timur yang terdaftar di OJK periode 2022-2024

- a. Tahun 2022

Berdasarkan hasil pengujian yang dilakukan terdapat perbedaan signifikan hasil prediksi kebangkrutan antara metode Altman dan Zmijewski, antara metode Altman dan Grover dan antara metode Zmijewski dan Grover.

- b. Tahun 2023

Berdasarkan hasil pengujian yang dilakukan terdapat perbedaan signifikan hasil prediksi kebangkrutan antara metode Altman dan Zmijewski, antara metode Altman dan Grover. Sedangkan antara metode Zmijewski dan Grover tidak terdapat perbedaan.

- c. Tahun 2024

Berdasarkan hasil pengujian yang dilakukan terdapat perbedaan signifikan hasil prediksi kebangkrutan antara metode Altman dan Zmijewski, dan metode Altman dan Grover. Sedangkan antara metode Zmijewski dan Grover tidak terdapat perbedaan.

3. Perbedaan signifikan antara hasil prediksi kebangkrutan dengan metode Altman, Zmijewski dan Grover pada BPRS di Jawa Timur yang terdaftar di OJK periode 2022- 2024

Berdasarkan hasil pengujian terdapat perbedaan hasil prediksi kebangkrutan antara metode Altman, Zmijewski dan Grover, pada BPRS di Jawa Timur pada tahun 2022, 2023 dan 2024.

B. Saran

Berdasarkan hasil penelitian dan kesimpulan yang sudah dipaparkan, maka dapat diberikan beberapa saran sebagai berikut:

1. Pihak manajemen BPRS disarankan untuk lebih memperhatikan rasio-rasio keuangan yang berpengaruh terhadap potensi kebangkrutan, seperti rasio likuiditas, profitabilitas, dan struktur permodalan. Manajemen perlu melakukan evaluasi secara berkala terhadap efisiensi penggunaan aset dan kemampuan menghasilkan laba operasional.
2. Untuk peneliti selanjutnya disarankan untuk memperluas cakupan penelitian, baik dari segi jumlah sampel BPRS maupun periode waktu pengamatan, agar hasil yang diperoleh lebih representatif dan akurat. Selain itu, dapat dipertimbangkan pula untuk menggunakan metode analisis kebangkrutan agar memperoleh pembandingan yang lebih komprehensif.
3. Bagi akademisi dan mahasiswa, penelitian ini dapat dijadikan sebagai referensi dalam memahami metode prediksi kebangkrutan, serta

mendorong kajian lebih lanjut mengenai kesehatan keuangan BPRS menggunakan pendekatan kuantitatif maupun kualitatif.



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LAMPIRAN

A. BPR dan BPRS yang mengalami kebangkrutan di Indonesia pada tahun 2019-2024

No.	BPR	No.	BPRS
2019			
1.	PT. BPR Jabal Tsur	1.	PT. BPRS Safir Bengkulu
2.	PT. BPR Pancadana	2.	PT. BPRS Muamalat Yotefa
3.	PT. BPR Legian	3.	PT. BPRS Hareukat
4.	PT. BPR Efiti Dana Sejahtera		
5.	PT. BPR Calliste Bestari		
6.	PT. BPR Fajar Artha Makmur		
2020			
1.	PT. BPR Tebas Loka Rizki	1.	PT. BPRS Gotong Royong
2.	PT. BPR Sekar		
3.	PT. BPR Lugono		
4.	PT. BPR Brata Nusantara		
5.	PT. BPR Artaprima Danajasa		
6.	PT. BPR Stigma Andalas		
7.	PT. BPR Nurul Barokah		
2021			
1.	PT. BPR Sewu Bali	1.	PT. BPRS Asri Madani Nusantara
2.	PT. BPR LPN Tapan		
3.	PT. BPR Bina Barumun		
4.	PT. BPR Sumber Usahawan Bersama		
5.	PT. BPR Utomo Widodo		
2022			
1.	PT. BPR Pasar Umum		
2023			
1.	PT. BPR Bangon Inti Marga		
2.	PT. BPR Karya Remaja Indramayu		
3.	PT. BPR Indotama UKM Sulawesi		
4.	PT. BPR Persada Guna		
2024			
1.	PT. BPR Wijayakusuma	1.	PT. BPRS Mojo Artho Kota Mojokerto Perseroda
2.	PT. BPR Usaha Madani Karya Mulia	2.	PT. BPRS Saka Dana Mulia
3.	PT. BPR Bank Pasar Bhakti	3.	PT. BPRS Kota Juang Perseroda
4.	Perumda BPR Bank Purworejo		
5.	PT. BPRECCASH		

6.	PT. BPR Aceh Utara		
7.	PT. BPR Sembilan Mutiara		
8.	PT. BPR Bali Artha Anugerah		
9.	PT. BPR Dananta		
10.	PT. BPR Bank Jepara Artha		
11.	PT. BPR Lubuk Raya Mandiri		
12.	PT. BPR Sumber Artha Waru Agung		
13.	PT. BPR Nature Primadan Capital		
14.	PT. BPR Duta Niaga		
15.	PT. BPR Pakan Rabaa Solok Selatan		
16.	PT. BPR Kencana		
17.	PT. BPR Arfak Indonesia		
2025 (Per April)			
		1.	PT BPRS Gebu Prima

B. Working Capital to Total Asset (X1) Metode Altman dan Grover

No.	BPRS	Tahun	Modal Kerja	Total Aset	X1
1	Amanah Sejahtera	2022	7,510,063	101,973,295	0.0736
		2023	6,875,048	102,908,727	0.0668
		2024	6,251,516	100,408,679	0.0623
2	Mandiri Mitra Sukses	2022	2,010,566	62,208,686	0.0323
		2023	198,316	65,993,721	0.0030
		2024	582,777	66,535,318	0.0088
3	Bakti Makmur Indah	2022	137,115,904	158,460,554	0.8653
		2023	130,675,692	146,567,215	0.8916
		2024	19,189,435	136,934,953	0.1401
4	Annisa Mukti	2022	6,239,492	19,538,214	0.3193
		2023	6,571,888	19,713,676	0.3334
		2024	6,738,010	18,190,451	0.3704
5	Unawi Barokah	2022	2,723,991	5,257,929	0.5181
		2023	2,885,997	9,905,527	0.2914
		2024	4,261,267	17,257,712	0.2469
6	Lantabur Tebuireng	2022	23,555,694	324,601,304	0.0726
		2023	25,739,736	335,353,476	0.0768
		2024	26,513,752	362,975,842	0.0730

No.	BPRS	Tahun	Modal Kerja	Total Aset	X1
7	Sampang Persoda	2022	8,289,662	145,091,323	0.0571
		2023	4,594,034	194,882,827	0.0236
		2024	2,663,379	255,450,882	0.0104
8	Sarana Prima Mandiri	2022	-34,804,217	59,443,004	-0.5855
		2023	7,231,152	70,289,935	0.1029
		2024	7,983,165	77,522,338	0.1030
9	Bhakti Semekar Perseroda	2022	157,891,293	1,162,401,615	0.1358
		2023	150,456,408	1,209,687,677	0.1244
		2024	170,650,867	1,088,136,827	0.1568
10	Bhakti Haji	2022	2,284,968	8,839,618	0.2585
		2023	4,499,525	12,007,609	0.3747
		2024	4,936,387	12,634,372	0.3907
11	Bumi Ranjani Kapanjen	2022	10,137,952	69,678,844	0.1455
		2023	60,762,613	74,007,317	0.8210
		2024	64,490,807	76,246,530	0.8458
12	Al Hijrah Tarbiyah	2022			
		2023			
		2024	9,808,703	70,504,127	0.1391
13	Daya Artha Mentari	2022	2,176,110	21,310,482	0.1021
		2023	1,181,872	20,989,288	0.0563
		2024	1,629,171	22,428,311	0.0726
14	Artha Pamenang	2022	8,449,292	55,723,632	0.1516
		2023	9,308,447	59,891,025	0.1554
		2024	8,516,385	58,005,883	0.1468
15	Rahma Syariah	2022	3,481,635	7,996,056	0.4354
		2023	8,549,229	16,255,115	0.5259
		2024	7,755,744	20,672,365	0.3752
16	Kabupaten Ngawi (Perseroda)	2022	20,225,906	129,349,042	0.1564
		2023	22,918,275	177,926,932	0.1288
		2024	26,682,342	209,800,717	0.1272
17	Magetan (Perseroda)	2022	17,268,400	63,889,608	0.2703
		2023	18,216,886	66,167,783	0.2753
		2024	18,643,377	69,920,906	0.2666
18	Al Maburr Badadan	2022	2,958,849	42,598,520	0.0695
		2023	3,311,589	38,394,966	0.0863
		2024	6,872,132	65,984,460	0.1041

No.	BPRS	Tahun	Modal Kerja	Total Aset	X1
19	Mitra Mentari Sejahtera	2022	-4,966,157	43,674,896	-0.1137
		2023	-4,744,876	45,505,848	-0.1043
		2024	-3,902,741	48,201,534	-0.0810
20	Madinah	2022	6,959,277	26,865,472	0.2590
		2023	5,132,201	23,685,545	0.2167
		2024	6,880,464	21,231,640	0.3241
21	Situbondo	2022	5,710,795	21,039,509	0.2714
		2023	6,273,292	24,302,223	0.2581
		2024	4,692,212	22,741,378	0.2063
22	Artha Sinar Sejahtera Syariah	2022	11,051,538	39,741,041	0.2781
		2023	12,485,303	51,517,676	0.2423
		2024	14,596,097	54,964,615	0.2656
23	Karya Mugi Santoso	2022	12,640,068	100,401,491	0.1259
		2023	14,534,136	120,417,665	0.1207
		2024	16,906,922	145,774,649	0.1160
24	Mitra Harmoni Kota Malang	2022	7,011,998	36,365,073	0.1928
		2023	8,616,779	38,028,359	0.2266
		2024	9,450,634	44,024,825	0.2147
25	Tanmiya Artha	2022	7,550,275	26,685,408	0.2829
		2023	8,197,856	26,770,253	0.3062
		2024	8,106,349	23,873,853	0.3395
26	Tunas Artha Jaya	2022	11,256,816	84,668,294	0.1330
		2023			
		2024			

C. X2 Metode Altman

No.	BPRS	Tahun	Laba Ditahan	Total Aset	X2
1	Amanah Sejahtera	2022	3,618,740	101,973,295	0.0355
		2023	3,376,116	102,908,727	0.0328
		2024	2,030,755	100,408,679	0.0202
2	Mandiri Mitra Sukses	2022	-2,453,449	62,208,686	-0.0394
		2023	-2,906,210	65,993,721	-0.0440
		2024	-3,774,334	66,535,318	-0.0567
3	Bakti Makmur	2022	10,259,782	158,460,554	0.0647

No.	BPRS	Tahun	Laba Ditahan	Total Aset	X2
	Indah	2023	9,275,668	146,567,215	0.0633
		2024	6,062,949	136,934,953	0.0443
4	Annisa Mukti	2022	1,800,135	19,538,214	0.0921
		2023	1,559,689	19,713,676	0.0791
		2024	1,377,067	18,190,451	0.0757
5	Unawi Barokah	2022	-2,193,550	5,257,929	-0.4172
		2023	-2,070,166	9,905,527	-0.2090
		2024	-1,769,380	17,257,712	-0.1025
6	Lantabur Tebuireng	2022	16,029,675	324,601,304	0.0494
		2023	18,407,124	335,353,476	0.0549
		2024	19,073,633	362,975,842	0.0525
7	Sampang Persoda	2022	1,376,933	145,091,323	0.0095
		2023	1,383,545	194,882,827	0.0071
		2024	1,717,307	255,450,882	0.0067
8	Sarana Prima Mandiri	2022	-49,955,096	59,443,004	-0.8404
		2023	-27,010,819	70,289,935	-0.3843
		2024	-27,453,099	77,522,338	-0.3541
9	Bhakti Semekar Perseroda	2022	43,303,755	1,162,401,615	0.0373
		2023	33,821,441	1,209,687,677	0.0280
		2024	34,347,404	1,088,136,827	0.0316
10	Bhakti Haji	2022	-109,136	8,839,618	-0.0123
		2023	443,146	12,007,609	0.0369
		2024	870,741	12,634,372	0.0689
11	Bumi Ranjani Kapanjen	2022	3,910,744	69,678,844	0.0561
		2023	4,061,494	74,007,317	0.0549
		2024	3,422,624	76,246,530	0.0449
12	Al Hijrah Tarbiyah	2022			
		2023			
		2024	1,284,163	70,504,127	0.0182
13	Daya Artha Mentari	2022	-861,574	21,310,482	-0.0404
		2023	-1,467,293	20,989,288	-0.0699
		2024	-1,395,207	22,428,311	-0.0622
14	Artha Pamenang	2022	2,708,295	55,723,632	0.0486
		2023	3,005,553	59,891,025	0.0502
		2024	3,138,030	58,005,883	0.0541
15	Rahma Syariah	2022	368,799	7,996,056	0.0461

No.	BPRS	Tahun	Laba Ditahan	Total Aset	X2
		2023	2,432,291	16,255,115	0.1496
		2024	1,813,473	20,672,365	0.0877
16	Kabupaten Ngawi (Perseroda)	2022	3,049,563	129,349,042	0.0236
		2023	4,998,496	177,926,932	0.0281
		2024	6,488,098	209,800,717	0.0309
17	Magetan (Perseroda)	2022	3,412,770	63,889,608	0.0534
		2023	3,417,560	66,167,783	0.0516
		2024	3,398,603	69,920,906	0.0486
18	Al Mabruur Badadan	2022	-3,437,977	42,598,520	-0.0807
		2023	-3,338,684	38,394,966	-0.0870
		2024	-2,943,513	65,984,460	-0.0446
19	Mitra Mentari Sejahtera	2022	1,679,498	43,674,896	0.0385
		2023	1,577,478	45,505,848	0.0347
		2024	1,720,684	48,201,534	0.0357
20	Madinah	2022	2,903,524	26,865,472	0.1081
		2023	1,094,864	23,685,545	0.0462
		2024	772,283	21,231,640	0.0364
21	Situbondo	2022	1,520,131	21,039,509	0.0723
		2023	1,592,974	24,302,223	0.0655
		2024	1,033,113	22,741,378	0.0454
22	Artha Sinar Sejahtera Syariah	2022	-9,338,341	39,741,041	-0.2350
		2023	-7,605,607	51,517,676	-0.1476
		2024	-5,608,980	54,964,615	-0.1020
23	Karya Mugi Santoso	2022	5,632,302	100,401,491	0.0561
		2023	6,962,509	120,417,665	0.0578
		2024	8,158,963	145,774,649	0.0560
24	Mitra Harmoni Kota Malang	2022	1,265,225	36,365,073	0.0348
		2023	1,815,931	38,028,359	0.0478
		2024	2,821,006	44,024,825	0.0641
25	Tanmiya Artha	2022	1,692,142	26,685,408	0.0634
		2023	1,456,247	26,770,253	0.0544
		2024	1,182,569	23,873,853	0.0495
26	Tunas Artha Jaya	2022			
		2023			
		2024	5,284,154	84,668,294	0.0624

D. X3 Metode Altman dan Grover

No.	BPRS	Tahun	EBIT	Total Aset	X3
1	Amanah Sejahtera	2022	1,048,157	101,973,295	0.0103
		2023	996,288	102,908,727	0.0097
		2024	-509,972	100,408,679	-0.0051
2	Mandiri Mitra Sukses	2022	3,550	62,208,686	0.0001
		2023	-447,139	65,993,721	-0.0068
		2024	-859,223	66,535,318	-0.0129
3	Bakti Makmur Indah	2022	3,340,987	158,460,554	0.0211
		2023	1,458,627	146,567,215	0.0100
		2024	-2,440,789	136,934,953	-0.0178
4	Annisa Mukti	2022	505,355	19,538,214	0.0259
		2023	588,804	19,713,676	0.0299
		2024	285,819	18,190,451	0.0157
5	Unawi Barokah	2022	-650,897	5,257,929	-0.1238
		2023	137,744	9,905,527	0.0139
		2024	314,139	17,257,712	0.0182
6	Lantabur Tebuireng	2022	10,311,571	324,601,304	0.0318
		2023	11,465,462	335,353,476	0.0342
		2024	9,025,754	362,975,842	0.0249
7	Sampang Persoda	2022	1,334,350	145,091,323	0.0092
		2023	1,221,736	194,882,827	0.0063
		2024	1,696,554	255,450,882	0.0066
8	Sarana Prima Mandiri	2022	-43,574,958	59,443,004	-0.7331
		2023	22,944,277	70,289,935	0.3264
		2024	-442,280	77,522,338	-0.0057
9	Bhakti Semekar Perseroda	2022	16,078,263	1,162,401,615	0.0138
		2023	13,728,025	1,209,687,677	0.0113
		2024	14,900,117	1,088,136,827	0.0137
10	Bhakti Haji	2022	592,289	8,839,618	0.0670
		2023	643,529	12,007,609	0.0536
		2024	459,230	12,634,372	0.0363
11	Bumi Ranjani Kapanjen	2022	2,674,442	69,678,844	0.0384
		2023	2,868,391	74,007,317	0.0388
		2024	1,760,672	76,246,530	0.0231
12	Al Hijrah Tarbiyah	2022			
		2023			
		2024	1,465,216	70,504,127	0.0208
13	Daya Artha Mentari	2022	125,665	21,310,482	0.0059
		2023	-602,577	20,989,288	-0.0287

No.	BPRS	Tahun	EBIT	Total Aset	X3
		2024	73,935	22,428,311	0.0033
14	Artha Pamenang	2022	2,124,587	55,723,632	0.0381
		2023	1,973,560	59,891,025	0.0330
		2024	1,770,648	58,005,883	0.0305
15	Rahma Syariah	2022	152,244	7,996,056	0.0190
		2023	-202,031	16,255,115	-0.0124
		2024	455,282	20,672,365	0.0220
16	Kabupaten Ngawi (Perseroda)	2022	3,118,088	129,349,042	0.0241
		2023	5,033,530	177,926,932	0.0283
		2024	6,218,582	209,800,717	0.0296
17	Magetan (Perseroda)	2022	2,038,325	63,889,608	0.0319
		2023	1,646,757	66,167,783	0.0249
		2024	1,258,087	69,920,906	0.0180
18	Al Maburr Badadan	2022	937,410	42,598,520	0.0220
		2023	272,402	38,394,966	0.0071
		2024	512,836	65,984,460	0.0078
19	Mitra Mentari Sejahtera	2022	842,768	43,674,896	0.0193
		2023	401,444	45,505,848	0.0088
		2024	148,353	48,201,534	0.0031
20	Madinah	2022	-188,703	26,865,472	-0.0070
		2023	-1,808,660	23,685,545	-0.0764
		2024	-322,580	21,231,640	-0.0152
21	Situbondo	2022	343,819	21,039,509	0.0163
		2023	371,696	24,302,223	0.0153
		2024	-245,533	22,741,378	-0.0108
22	Artha Sinar Sejahtera Syariah	2022	1,281,185	39,741,041	0.0322
		2023	2,004,664	51,517,676	0.0389
		2024	2,421,357	54,964,615	0.0441
23	Karya Mugi Santoso	2022	1,425,637	100,401,491	0.0142
		2023	2,004,708	120,417,665	0.0166
		2024	2,365,630	145,774,649	0.0162
24	Mitra Harmoni Kota Malang	2022	521,401	36,365,073	0.0143
		2023	657,806	38,028,359	0.0173
		2024	1,205,939	44,024,825	0.0274
25	Tanmiya Artha	2022	1,575,488	26,685,408	0.0590
		2023	1,226,282	26,770,253	0.0458
		2024	850,235	23,873,853	0.0356
26	Tunas Artha Jaya	2022			
		2023			
		2024	1,393,579	84,668,294	0.0165

E. X4 Metode Altman

No.	BPRS	Tahun	Nilai Buku Ekuitas	Nilai Buku Utang	X4
1	Amanah Sejahtera	2022	13,361,453	88,611,843	0.1508
		2023	13,118,829	89,789,899	0.1461
		2024	12,273,468	88,135,212	0.1393
2	Mandiri Mitra Sukses	2022	3,746,551	58,462,135	0.0641
		2023	3,993,790	61,999,931	0.0644
		2024	3,125,666	63,409,652	0.0493
3	Bakti Makmur Indah	2022	27,565,725	130,894,829	0.2106
		2023	29,081,611	117,485,604	0.2475
		2024	25,868,892	111,066,061	0.2329
4	Annisa Mukti	2022	6,800,135	12,738,079	0.5338
		2023	6,809,789	12,903,888	0.5277
		2024	6,627,167	11,563,284	0.5731
5	Unawi Barokah	2022	2,806,450	2,451,480	1.1448
		2023	2,929,834	6,975,693	0.4200
		2024	4,230,620	13,027,091	0.3248
6	Lantabur Tebuireng	2022	30,480,149	294,121,155	0.1036
		2023	32,857,598	302,495,879	0.1086
		2024	33,524,107	329,451,736	0.1018
7	Sampang Persoda	2022	22,966,933	122,124,389	0.1881
		2023	22,973,545	171,909,282	0.1336
		2024	33,308,307	222,142,576	0.1499
8	Sarana Prima Mandiri	2022	-33,032,096	92,475,100	-0.3572
		2023	7,912,181	62,377,754	0.1268
		2024	13,367,901	64,154,437	0.2084
9	Bhakti Semekar Perseroda	2022	209,303,755	953,097,858	0.2196
		2023	199,821,441	1,009,866,236	0.1979
		2024	207,847,404	880,289,423	0.2361
10	Bhakti Haji	2022	2,507,166	6,332,452	0.3959
		2023	4,616,448	7,391,160	0.6246
		2024	5,042,741	7,591,632	0.6642
11	Bumi Ranjani Kapanjen	2022	10,910,744	58,768,101	0.1857
		2023	11,061,494	62,945,825	0.1757
		2024	10,422,624	65,823,907	0.1583
12	Al Hijrah Tarbiyah	2022	-	-	-
		2023	-	-	-
		2024	9,890,973	60,613,156	0.1632
13	Daya Artha Mentari	2022	3,309,636	18,000,846	0.1839
		2023	2,703,917	18,285,371	0.1479

No.	BPRS	Tahun	Nilai Buku Ekuitas	Nilai Buku Utang	X4
		2024	3,126,003	19,302,309	0.1619
14	Artha Pamenang	2022	8,708,295	47,015,339	0.1852
		2023	9,005,553	50,885,472	0.1770
		2024	9,138,030	48,867,853	0.1870
15	Rahma Syariah	2022	3,668,799	4,327,257	0.8478
		2023	8,732,291	7,522,824	1.1608
		2024	8,113,473	12,558,892	0.6460
16	Kabupaten Ngawi (Perseroda)	2022	23,049,563	106,299,479	0.2168
		2023	24,998,496	152,928,436	0.1635
		2024	26,488,098	183,312,619	0.1445
17	Magetan (Perseroda)	2022	18,062,770	45,826,838	0.3942
		2023	19,067,560	47,100,224	0.4048
		2024	19,048,603	50,872,303	0.3744
18	Al Mabrur Badadan	2022	8,289,911	34,308,609	0.2416
		2023	8,389,204	30,005,762	0.2796
		2024	12,784,375	53,200,085	0.2403
19	Mitra Mentari Sejahtera	2022	7,679,498	35,995,398	0.2133
		2023	7,577,478	37,928,368	0.1998
		2024	7,720,684	40,480,848	0.1907
20	Madinah	2022	6,903,524	19,961,948	0.3458
		2023	5,094,864	18,590,681	0.2741
		2024	6,772,283	14,459,357	0.4684
21	Situbondo	2022	7,353,331	13,686,179	0.5373
		2023	7,426,174	16,876,049	0.4400
		2024	6,866,313	15,875,065	0.4325
22	Artha Sinar Sejahtera Syariah	2022	11,161,659	28,579,382	0.3905
		2023	12,894,393	38,623,283	0.3339
		2024	14,891,020	40,073,596	0.3716
23	Karya Mugi Santoso	2022	15,632,302	84,769,190	0.1844
		2023	16,962,509	103,455,157	0.1640
		2024	18,158,963	127,615,686	0.1423
24	Mitra Harmoni Kota Malang	2022	8,915,225	27,449,848	0.3248
		2023	9,465,931	28,562,429	0.3314
		2024	10,471,006	33,553,818	0.3121
25	Tanmiya Artha	2022	7,386,142	19,299,267	0.3827
		2023	7,150,247	19,620,006	0.3644
		2024	6,876,569	16,997,284	0.4046
26	Tunas Artha Jaya	2022		-	-
		2023		-	-
		2024	11,734,154	72,934,140	0.1609

F. ROA Zmijewski dan Grover

No.	BPRS	Tahun	ROA (Laporan Keuangan)
1	Amanah Sejahtera	2022	0.0104
		2023	0.0097
		2024	-0.005
2	Mandiri Mitra Sukses	2022	0.0036
		2023	-0.0036
		2024	0.013
3	Bakti Makmur Indah	2022	0.0219
		2023	0.0098
		2024	-0.0179
4	Annisa Mukti	2022	0.0283
		2023	0.0304
		2024	0.0157
5	Unawi Barokah	2022	-0.1222
		2023	0.0167
		2024	0.0238
6	Lantabur Tebuireng	2022	0.0321
		2023	0.0346
		2024	0.0262
7	Sampang Persoda	2022	0.0122
		2023	0.0173
		2024	0.0183
8	Sarana Prima Mandiri	2022	-0.5548
		2023	0.3005
		2024	-0.0061

No.	BPRS	Tahun	ROA (Laporan Keuangan)
9	Bhakti Semekar Perseroda	2022	0.0144
		2023	0.0133
		2024	0.0141
10	Bhakti Haji	2022	0.0579
		2023	0.0527
		2024	0.0421
11	Bumi Ranjani Kapanjen	2022	0.0393
		2023	0.0401
		2024	0.0234
12	Al Hijrah Tarbiyah	2022	-
		2023	-
		2024	0.0325
13	Daya Artha Mentari	2022	0.0066
		2023	-0.0294
		2024	0.0036
14	Artha Pamenang	2022	0.0381
		2023	0.0399
		2024	0.0297
15	Rahma Syariah	2022	0.0169
		2023	-0.0157
		2024	0.0219
16	Kabupaten Ngawi (Perseroda)	2022	0.0383
		2023	0.038
		2024	0.0366
17	Magetan (Perseroda)	2022	0.0352

No.	BPRS	Tahun	ROA (Laporan Keuangan)
		2023	0.0212
		2024	0.0163
18	Al Mabror Badadan	2022	0.0186
		2023	0.0071
		2024	0.0103
19	Mitra Mentari Sejahtera	2022	0.1366
		2023	0.0667
		2024	0.003
20	Madinah	2022	-0.1242
		2023	-0.0755
		2024	-0.0155
21	Situbondo	2022	0.0269
		2023	0.0172
		2024	-0.0107
22	Artha Sinar Sejahtera Syariah	2022	0.0401
		2023	0.0454
		2024	0.0443
23	Karya Mugi Santoso	2022	0.0162
		2023	0.019
		2024	0.0209
24	Mitra Harmoni Kota Malang	2022	0.0123
		2023	0.0182
		2024	0.03
25	Tanmiya Artha	2022	0.0512
		2023	0.0258

No.	BPRS	Tahun	ROA (Laporan Keuangan)
		2024	0.0343
26	Tunas Artha Jaya	2022	-
		2023	-
		2024	0.0169

G. X2 Zmijewski

No.	BPRS	Tahun	Total Liabilitas	Total Aset	X2
1	Amanah Sejahtera	2022	88,611,843	101,973,295	0.8690
		2023	89,789,899	102,908,727	0.8725
		2024	88,135,212	100,408,679	0.8778
2	Mandiri Mitra Sukses	2022	58,462,135	62,208,686	0.9398
		2023	61,999,931	65,993,721	0.9395
		2024	63,409,652	66,535,318	0.9530
3	Bakti Makmur Indah	2022	130,894,829	158,460,554	0.8260
		2023	117,485,604	146,567,215	0.8016
		2024	111,066,061	136,934,953	0.8111
4	Annisa Mukti	2022	12,738,079	19,538,214	0.6520
		2023	12,903,888	19,713,676	0.6546
		2024	11,563,284	18,190,451	0.6357
5	Unawi Barokah	2022	2,451,480	5,257,929	0.4662
		2023	6,975,693	9,905,527	0.7042
		2024	13,027,091	17,257,712	0.7549
6	Lantabur Tebuireng	2022	294,121,155	324,601,304	0.9061
		2023	302,495,879	335,353,476	0.9020
		2024	329,451,736	362,975,842	0.9076
7	Sampang Persoda	2022	122,124,389	145,091,323	0.8417
		2023	171,909,282	194,882,827	0.8821
		2024	222,142,576	255,450,882	0.8696
8	Sarana Prima Mandiri	2022	92,475,100	59,443,004	1.5557
		2023	62,377,754	70,289,935	0.8874
		2024	64,154,437	77,522,338	0.8276
9	Bhakti Semekar Perseroda	2022	953,097,858	1,162,401,615	0.8199
		2023	1,009,866,236	1,209,687,677	0.8348
		2024	880,289,423	1,088,136,827	0.8090
10	Bhakti Haji	2022	6,332,452	8,839,618	0.7164

No.	BPRS	Tahun	Total Liabilitas	Total Aset	X2
		2023	7,391,160	12,007,609	0.6155
		2024	7,591,632	12,634,372	0.6009
11	Bumi Ranjani Kapanjen	2022	58,768,101	69,678,844	0.8434
		2023	62,945,825	74,007,317	0.8505
		2024	65,823,907	76,246,530	0.8633
12	Al Hijrah Tarbiyah	2022	-	-	-
		2023	-	-	-
		2024	60,613,156	70,504,127	0.8597
13	Daya Artha Mentari	2022	18,000,846	21,310,482	0.8447
		2023	18,285,371	20,989,288	0.8712
		2024	19,302,309	22,428,311	0.8606
14	Artha Pamenang	2022	47,015,339	55,723,632	0.8437
		2023	50,885,472	59,891,025	0.8496
		2024	48,867,853	58,005,883	0.8425
15	Rahma Syariah	2022	4,327,257	7,996,056	0.5412
		2023	7,522,824	16,255,115	0.4628
		2024	12,558,892	20,672,365	0.6075
16	Kabupaten Ngawi (Perseroda)	2022	106,299,479	129,349,042	0.8218
		2023	152,928,436	177,926,932	0.8595
		2024	183,312,619	209,800,717	0.8737
17	Magetan (Perseroda)	2022	45,826,838	63,889,608	0.7173
		2023	47,100,224	66,167,783	0.7118
		2024	50,872,303	69,920,906	0.7276
18	Al Maburr Badadan	2022	34,308,609	42,598,520	0.8054
		2023	30,005,762	38,394,966	0.7815
		2024	53,200,085	65,984,460	0.8063
19	Mitra Mentari Sejahtera	2022	35,995,398	43,674,896	0.8242
		2023	37,928,368	45,505,848	0.8335
		2024	40,480,848	48,201,534	0.8398
20	Madinah	2022	19,961,948	26,865,472	0.7430
		2023	18,590,681	23,685,545	0.7849
		2024	14,459,357	21,231,640	0.6810
21	Situbondo	2022	13,686,179	21,039,509	0.6505
		2023	16,876,049	24,302,223	0.6944
		2024	15,875,065	22,741,378	0.6981
22	Artha Sinar Sejahtera Syariah	2022	28,579,382	39,741,041	0.7191
		2023	38,623,283	51,517,676	0.7497
		2024	40,073,596	54,964,615	0.7291
23	Karya Mugi Santoso	2022	84,769,190	100,401,491	0.8443
		2023	103,455,157	120,417,665	0.8591

No.	BPRS	Tahun	Total Liabilitas	Total Aset	X2
			2024	127,615,686	145,774,649
24	Mitra Harmoni Kota Malang	2022	27,449,848	36,365,073	0.7548
		2023	28,562,429	38,028,359	0.7511
		2024	33,553,818	44,024,825	0.7622
25	Tanmiya Artha	2022	19,299,267	26,685,408	0.7232
		2023	19,620,006	26,770,253	0.7329
		2024	16,997,284	23,873,853	0.7120
26	Tunas Artha Jaya	2022	-	-	-
		2023	-	-	-
		2024	72,934,140	84,668,294	0.8614

H. X3 Zmijewski

No.	BPRS	Tahun	Aset Lancar	Liabilitas Lancar	X3
1	Amanah Sejahtera	2022	94,745,018	87,234,955	1.0861
		2023	95,281,634	88,406,586	1.0778
		2024	93,863,462	87,611,946	1.0714
2	Mandiri Mitra Sukses	2022	60,362,104	58,315,538	1.0351
		2023	62,046,244	61,847,928	1.0032
		2024	63,838,251	63,255,474	1.0092
3	Bakti Makmur Indah	2022	145,931,448	8,815,544	16.5539
		2023	136,557,547	5,881,855	23.2167
		2024	127,283,451	108,094,016	1.1775
4	Annisa Mukti	2022	18,382,513	12,143,021	1.5138
		2023	18,959,398	12,387,510	1.5305
		2024	17,768,978	11,030,968	1.6108
5	Unawi Barokah	2022	5,072,937	2,348,946	2.1597
		2023	9,694,915	6,808,918	1.4239
		2024	17,067,837	12,806,570	1.3327
6	Lantabur Tebuireng	2022	313,404,814	289,849,120	1.0813
		2023	324,911,016	299,171,280	1.0860
		2024	353,756,458	327,242,706	1.0810
7	Sampang Persoda	2022	129,967,477	121,677,815	1.0681
		2023	176,376,387	171,782,353	1.0267
		2024	223,642,541	220,979,162	1.0121
8	Sarana Prima Mandiri	2022	57,145,671	91,949,888	0.6215
		2023	69,131,061	61,899,909	1.1168
		2024	70,823,112	62,839,947	1.1270
9	Bhakti Semekar	2022	1,095,703,318	937,812,025	1.1684

No.	BPRS Perseroda	Tahun	Aset Lancar	Liabilitas Lancar	X3
		2023	1,147,447,384	996,990,976	1.1509
		2024	1,036,508,575	865,857,708	1.1971
10	Bhakti Haji	2022	8,602,951	6,317,983	1.3617
		2023	11,790,504	7,290,979	1.6171
		2024	12,454,794	7,518,407	1.6566
11	Bumi Ranjani Kapanjen	2022	66,826,414	56,688,462	1.1788
		2023	70,595,873	60,762,613	1.1618
		2024	73,794,941	64,490,807	1.1443
12	Al Hijrah Tarbiyah	2022	-	-	-
		2023	-	-	-
		2024	70,127,617	60,318,914	1.1626
13	Daya Artha Mentari	2022	20,095,727	17,919,617	1.1214
		2023	19,135,092	17,953,220	1.0658
		2024	20,686,475	19,057,304	1.0855
14	Artha Pamenang	2022	53,081,200	44,631,908	1.1893
		2023	57,516,714	48,208,267	1.1931
		2024	55,074,869	46,558,484	1.1829
15	Rahma Syariah	2022	7,766,069	4,284,434	1.8126
		2023	15,734,872	7,185,643	2.1898
		2024	19,921,849	12,166,105	1.6375
16	Kabupaten Ngawi (Perseroda)	2022	126,230,794	106,004,888	1.1908
		2023	174,615,226	151,696,951	1.1511
		2024	206,454,583	179,772,241	1.1484
17	Magetan (Perseroda)	2022	62,411,788	45,143,388	1.3825
		2023	64,855,810	46,638,924	1.3906
		2024	68,692,198	50,048,821	1.3725
18	Al Mabruur Badadan	2022	37,035,307	34,076,458	1.0868
		2023	33,152,191	29,840,602	1.1110
		2024	59,910,587	53,038,455	1.1296
19	Mitra Mentari Sejahtera	2022	30,779,656	35,745,813	0.8611
		2023	33,025,250	37,770,126	0.8744
		2024	36,412,503	40,315,244	0.9032
20	Madinah	2022	25,926,281	18,967,004	1.3669
		2023	22,687,932	17,555,731	1.2923
		2024	20,237,473	13,357,009	1.5151
21	Situbondo	2022	19,181,607	13,470,812	1.4239
		2023	22,912,437	16,639,145	1.3770
		2024	20,309,530	15,617,318	1.3004
22	Artha Sinar Sejahtera	2022	39,421,783	28,370,245	1.3895
		2023	50,472,097	37,986,794	1.3287

No.	BPRS	Tahun	Aset Lancar	Liabilitas Lancar	X3
			54,389,905	39,793,808	1.3668
23	Karya Mugi Santoso	2022	95,966,055	83,325,987	1.1517
		2023	116,542,250	102,008,114	1.1425
		2024	143,086,438	126,179,516	1.1340
24	Mitra Harmoni Kota Malang	2022	34,408,930	27,396,932	1.2559
		2023	37,077,969	28,461,190	1.3028
		2024	42,787,891	33,337,257	1.2835
25	Tanmiya Artha	2022	26,352,337	18,802,062	1.4016
		2023	27,268,228	19,070,372	1.4299
		2024	24,498,643	16,392,294	1.4945
26	Tunas Artha Jaya	2022	-	-	-
		2023	-	-	-
		2024	82,040,283	70,783,467	1.1590

I. Perhitungan Prediksi Kebangkrutan Metode Altman Modifikasi

No	BPRS	Tahun	X1	X2	X3	X4	Z	Keterangan
1	Amanah Sejahtera	2022	0.0736	0.0355	0.0103	0.1508	0.8262	Berpotensi Bangkrut
		2023	0.0668	0.0328	0.0097	0.1461	0.7637	Berpotensi Bangkrut
		2024	0.0623	0.0202	(0.0051)	0.1393	0.5865	Berpotensi Bangkrut
2	Mandiri Mitra Sukses	2022	0.0323	(0.0394)	0.0001	0.0641	0.1511	Berpotensi Bangkrut
		2023	0.0030	(0.0440)	(0.0068)	0.0644	(0.1017)	Berpotensi Bangkrut
		2024	0.0088	(0.0567)	(0.0129)	0.0493	(0.1625)	Berpotensi Bangkrut
3	Bakti Makmur Indah	2022	0.8653	0.0647	0.0211	0.2106	6.2503	Sehat
		2023	0.8916	0.0633	0.0100	0.2475	6.3818	Sehat
		2024	0.1401	0.0443	(0.0178)	0.2329	1.1884	Gray Area
4	Annisa Mukti	2022	0.3193	0.0921	0.0259	0.5338	3.1296	Sehat
		2023	0.3334	0.0791	0.0299	0.5277	3.1996	Sehat
		2024	0.3704	0.0757	0.0157	0.5731	3.3841	Sehat
5	Unawi Barokah	2022	0.5181	(0.4172)	(0.1238)	1.1448	2.4087	Gray Area
		2023	0.2914	(0.2090)	0.0139	0.4200	1.7644	Gray Area
		2024	0.2469	(0.1025)	0.0182	0.3248	1.7489	Gray Area
6	Lantabur	2022	0.0726	0.0494	0.0318	0.1036	0.9593	Berpotensi

No	BPRS	Tahun	X1	X2	X3	X4	Z	Keterangan
	Tebuireng	2023						Bangkrut
			0.0768	0.0549	0.0342	0.1086	1.0262	Berpotensi Bangkrut
			0.0730	0.0525	0.0249	0.1018	0.9244	Berpotensi Bangkrut
7	Sampang Persoda	2022	0.0571	0.0095	0.0092	0.1881	0.6650	Berpotensi Bangkrut
		2023	0.0236	0.0071	0.0063	0.1336	0.3602	Berpotensi Bangkrut
		2024	0.0104	0.0067	0.0066	0.1499	0.2924	Berpotensi Bangkrut
8	Sarana Prima Mandiri	2022	(0.5855)	(0.8404)	(0.7331)	(0.3572)	(11.8818)	Berpotensi Bangkrut
		2023	0.1029	(0.3843)	0.3264	0.1268	1.7489	Gray Area
		2024	0.1030	(0.3541)	(0.0057)	0.2084	(0.2985)	Berpotensi Bangkrut
9	Bhakti Semekar Perseroda	2022	0.1358	0.0373	0.0138	0.2196	1.3360	Gray Area
		2023	0.1244	0.0280	0.0113	0.1979	1.1911	Gray Area
		2024	0.1568	0.0316	0.0137	0.2361	1.4716	Gray Area
10	Bhakti Haji	2022	0.2585	(0.0123)	0.0670	0.3959	2.5214	Gray Area
		2023	0.3747	0.0369	0.0536	0.6246	3.5945	Sehat
		2024	0.3907	0.0689	0.0363	0.6642	3.7295	Sehat
11	Bumi Ranjani Kapanjen	2022	0.1455	0.0561	0.0384	0.1857	1.5903	Gray Area
		2023	0.8210	0.0549	0.0388	0.1757	6.0099	Sehat
		2024	0.8458	0.0449	0.0231	0.1583	6.0163	Sehat
12	Al Hijrah Tarbiyah	2022	-	-	-	-	-	-
		2023	-	-	-	-	-	-
		2024	0.1391	0.0182	0.0208	0.1632	1.2830	Gray Area
13	Daya Artha Mentari	2022	0.1021	(0.0404)	0.0059	0.1839	0.7708	Berpotensi Bangkrut
		2023	0.0563	(0.0699)	(0.0287)	0.1479	0.1038	Berpotensi Bangkrut
		2024	0.0726	(0.0622)	0.0033	0.1619	0.4659	Berpotensi Bangkrut
14	Artha Pamenang	2022	0.1516	0.0486	0.0381	0.1852	1.6038	Gray Area
		2023	0.1554	0.0502	0.0330	0.1770	1.5904	Gray Area
		2024	0.1468	0.0541	0.0305	0.1870	1.5410	Gray Area
15	Rahma Syariah	2022	0.4354	0.0461	0.0190	0.8478	4.0249	Sehat
		2023	0.5259	0.1496	(0.0124)	1.1608	5.0733	Sehat
		2024	0.3752	0.0877	0.0220	0.6460	3.5735	Sehat

No	BPRS	Tahun	X1	X2	X3	X4	Z	Keterangan
16	Kabupaten Ngawi (Perseroda)	2022	0.1564	0.0236	0.0241	0.2168	1.4923	Gray Area
		2023	0.1288	0.0281	0.0283	0.1635	1.2983	Gray Area
		2024	0.1272	0.0309	0.0296	0.1445	1.2860	Gray Area
17	Magetan (Perseroda)	2022	0.2703	0.0534	0.0319	0.3942	2.5755	Gray Area
		2023	0.2753	0.0516	0.0249	0.4048	2.5668	Gray Area
		2024	0.2666	0.0486	0.0180	0.3744	2.4217	Gray Area
18	Al Mabrrur Badadan	2022	0.0695	(0.0807)	0.0220	0.2416	0.5941	Berpotensi Bangkrut
		2023	0.0863	(0.0870)	0.0071	0.2796	0.6236	Berpotensi Bangkrut
		2024	0.1041	(0.0446)	0.0078	0.2403	0.8423	Berpotensi Bangkrut
19	Mitra Mentari Sejahtera	2022	(0.1137)	0.0385	0.0193	0.2133	(0.2669)	Berpotensi Bangkrut
		2023	(0.1043)	0.0347	0.0088	0.1998	(0.3019)	Berpotensi Bangkrut
		2024	(0.0810)	0.0357	0.0031	0.1907	(0.1938)	Berpotensi Bangkrut
20	Madinah	2022	0.2590	0.1081	(0.0070)	0.3458	2.3676	Gray Area
		2023	0.2167	0.0462	(0.0764)	0.2741	1.3467	Gray Area
		2024	0.3241	0.0364	(0.0152)	0.4684	2.6341	Sehat
21	Situbondo	2022	0.2714	0.0723	0.0163	0.5373	2.6901	Sehat
		2023	0.2581	0.0655	0.0153	0.4400	2.4719	Gray Area
		2024	0.2063	0.0454	(0.0108)	0.4325	1.8832	Gray Area
22	Artha Sinar Sejahtera Syariah	2022	0.2781	(0.2350)	0.0322	0.3905	1.6849	Gray Area
		2023	0.2423	(0.1476)	0.0389	0.3339	1.7206	Gray Area
		2024	0.2656	(0.1020)	0.0441	0.3716	2.0956	Gray Area
23	Karya Mugi Santoso	2022	0.1259	0.0561	0.0142	0.1844	1.2978	Gray Area
		2023	0.1207	0.0578	0.0166	0.1640	1.2643	Gray Area
		2024	0.1160	0.0560	0.0162	0.1423	1.2017	Gray Area
24	Mitra Harmoni Kota Malang	2022	0.1928	0.0348	0.0143	0.3248	1.8157	Gray Area
		2023	0.2266	0.0478	0.0173	0.3314	2.1063	Gray Area
		2024	0.2147	0.0641	0.0274	0.3121	2.1288	Gray Area
25	Tanmiya Artha	2022	0.2829	0.0634	0.0590	0.3827	2.8614	Sehat
		2023	0.3062	0.0544	0.0458	0.3644	2.8767	Sehat
		2024	0.3395	0.0495	0.0356	0.4046	3.0530	Sehat
26	Tunas Artha Jaya	2022	-	-	-	-	-	-
		2023	-	-	-	-	-	-
		2024	0.1330	0.0624	0.0165	0.1609	1.3552	Gray Area

J. Perhitunagn Prediksi kebangkrutan Metode Zmijewski

No	BPRS	Tahun	ROA	X2	X3	X	Keterangan
1	Amanah Sejahtera	2022	0.0104	0.8690	1.0861	0.6020	Berpotensi Bangkrut
		2023	0.0097	0.8725	1.0778	0.6254	Berpotensi Bangkrut
		2024	(0.0050)	0.8778	1.0714	0.7215	Berpotensi Bangkrut
2	Mandiri Mitra Sukses	2022	0.0036	0.9398	1.0351	1.0364	Berpotensi Bangkrut
		2023	(0.0036)	0.9395	1.0032	1.0672	Berpotensi Bangkrut
		2024	0.0130	0.9530	1.0092	1.0697	Berpotensi Bangkrut
3	Bakti Makmur Indah	2022	0.0219	0.8260	16.5539	0.2437	Berpotensi Bangkrut
		2023	0.0098	0.8016	23.2167	0.1320	Berpotensi Bangkrut
		2024	(0.0179)	0.8111	1.1775	0.3990	Berpotensi Bangkrut
4	Annisa Mukti	2022	0.0283	0.6520	1.5138	(0.7172)	Sehat
		2023	0.0304	0.6546	1.5305	(0.7119)	Sehat
		2024	0.0157	0.6357	1.6108	(0.7537)	Sehat
5	Unawi Barokah	2022	(0.1222)	0.4662	2.1597	(1.1011)	Sehat
		2023	0.0167	0.7042	1.4239	(0.3668)	Sehat
		2024	0.0238	0.7549	1.3327	(0.1098)	Sehat
6	Lantabur Tebuireng	2022	0.0321	0.9061	1.0813	0.7160	Berpotensi Bangkrut
		2023	0.0346	0.9020	1.0860	0.6815	Berpotensi Bangkrut
		2024	0.0262	0.9076	1.0810	0.7513	Berpotensi Bangkrut
7	Sampang Persoda	2022	0.0122	0.8417	1.0681	0.4386	Berpotensi Bangkrut
		2023	0.0173	0.8821	1.0267	0.6461	Berpotensi Bangkrut
		2024	0.0183	0.8696	1.0121	0.5704	Berpotensi Bangkrut
8	Sarana Prima Mandiri	2022	(0.5548)	1.5557	0.6215	7.0616	Berpotensi Bangkrut
		2023	0.3005	0.8874	1.1168	(0.5983)	Sehat
		2024	(0.0061)	0.8276	1.1270	0.4400	Berpotensi

No	BPRS	Tahun	ROA	X2	X3	X	Keterangan
							Bangkrut
9	Bhakti Semekar Perseroda	2022	0.0144	0.8199	1.1684	0.3042	Berpotensi Bangkrut
		2023	0.0133	0.8348	1.1509	0.3940	Berpotensi Bangkrut
		2024	0.0141	0.8090	1.1971	0.2430	Berpotensi Bangkrut
10	Bhakti Haji	2022	0.0579	0.7164	1.3617	(0.4827)	Sehat
		2023	0.0527	0.6155	1.6171	(1.0350)	Sehat
		2024	0.0421	0.6009	1.6566	(1.0711)	Sehat
11	Bumi Ranjani Kapanjen	2022	0.0393	0.8434	1.1788	0.3259	Berpotensi Bangkrut
		2023	0.0401	0.8505	1.1618	0.3630	Berpotensi Bangkrut
		2024	0.0234	0.8633	1.1443	0.5110	Berpotensi Bangkrut
12	Al Hijrah Tarbiyah	2022	-	-	-	-	-
		2023	-	-	-	-	-
		2024	0.0325	0.8597	1.1626	0.4495	Berpotensi Bangkrut
13	Daya Artha Mentari	2022	0.0066	0.8447	1.1214	0.4806	Berpotensi Bangkrut
		2023	(0.0294)	0.8712	1.0658	0.7937	Berpotensi Bangkrut
		2024	0.0036	0.8606	1.0855	0.5850	Berpotensi Bangkrut
14	Artha Pamenang	2022	0.0381	0.8437	1.1893	0.3330	Berpotensi Bangkrut
		2023	0.0399	0.8496	1.1931	0.3586	Berpotensi Bangkrut
		2024	0.0297	0.8425	1.1829	0.3637	Berpotensi Bangkrut
15	Rahma Syariah	2022	0.0169	0.5412	1.8126	(1.2986)	Sehat
		2023	(0.0157)	0.4628	2.1898	(1.6002)	Sehat
		2024	0.0219	0.6075	1.6375	(0.9422)	Sehat
16	Kabupaten Ngawi (Perseroda)	2022	0.0383	0.8218	1.1908	0.2072	Berpotensi Bangkrut
		2023	0.0380	0.8595	1.1511	0.4236	Berpotensi Bangkrut
		2024	0.0366	0.8737	1.1484	0.5111	Berpotensi Bangkrut
17	Magetan	2022	0.0352	0.7173	1.3825	(0.3754)	Sehat

No	BPRS	Tahun	ROA	X2	X3	X	Keterangan
	(Perseroda)	2023	0.0212	0.7118	1.3906	(0.3435)	Sehat
		2024	0.0163	0.7276	1.3725	(0.2317)	Sehat
18	Al Maburr Badadan	2022	0.0186	0.8054	1.0868	0.2027	Berpotensi Bangkrut
		2023	0.0071	0.7815	1.1110	0.1182	Berpotensi Bangkrut
		2024	0.0103	0.8063	1.1296	0.2448	Berpotensi Bangkrut
19	Mitra Mentari Sejahtera	2022	0.1366	0.8242	0.8611	(0.2204)	Sehat
		2023	0.0667	0.8335	0.8744	0.1472	Berpotensi Bangkrut
		2024	0.0030	0.8398	0.9032	0.4699	Berpotensi Bangkrut
20	Madinah	2022	(0.1242)	0.7430	1.3669	0.4887	Berpotensi Bangkrut
		2023	(0.0755)	0.7849	1.2923	0.5085	Berpotensi Bangkrut
		2024	(0.0155)	0.6810	1.5151	(0.3544)	Sehat
21	Situbondo	2022	0.0269	0.6505	1.4239	(0.7189)	Sehat
		2023	0.0172	0.6944	1.3770	(0.4247)	Sehat
		2024	(0.0107)	0.6981	1.3004	(0.2781)	Sehat
22	Artha Sinar Sejahtera Syariah	2022	0.0401	0.7191	1.3895	(0.3869)	Sehat
		2023	0.0454	0.7497	1.3287	(0.2363)	Sehat
		2024	0.0443	0.7291	1.3668	(0.3491)	Sehat
23	Karya Mugi Santoso	2022	0.0162	0.8443	1.1517	0.4350	Berpotensi Bangkrut
		2023	0.0190	0.8591	1.1425	0.5070	Berpotensi Bangkrut
		2024	0.0209	0.8754	1.1340	0.5914	Berpotensi Bangkrut
24	Mitra Harmoni Kota Malang	2022	0.0123	0.7548	1.2559	(0.0578)	Sehat
		2023	0.0182	0.7511	1.3028	(0.1059)	Sehat
		2024	0.0300	0.7622	1.2835	(0.0958)	Sehat
25	Tanmiya Artha	2022	0.0512	0.7232	1.4016	(0.4137)	Sehat
		2023	0.0258	0.7329	1.4299	(0.2443)	Sehat
		2024	0.0343	0.7120	1.4945	(0.4021)	Sehat
26	Tunas Artha Jaya	2022	-	-	-	-	-
		2023	-	-	-	-	-
		2024	0.0169	0.8614	1.1590	0.5294	Berpotensi Bangkrut

K. Perhitungan Prediksi Kebangkrutan Metode Grover

No.	BPRS	Tahun	X1	X2	ROA	Score	Keterangan
1	Amanah Sejahtera	2022	0.0736	0.0103	0.0104	0.2133	Sehat
		2023	0.0668	0.0097	0.0097	0.2000	Sehat
		2024	0.0623	-0.0051	-0.0050	0.1425	Sehat
2	Mandiri Mitra Sukses	2022	0.0323	0.0001	0.0036	0.1105	Sehat
		2023	0.0030	-0.0068	-0.0036	0.0390	Sehat
		2024	0.0088	-0.0129	0.0130	0.0273	Sehat
3	Bakti Makmur Indah	2022	0.8653	0.0211	0.0219	1.5562	Sehat
		2023	0.8916	0.0100	0.0098	1.5618	Sehat
		2024	0.1401	-0.0178	-0.0179	0.2278	Sehat
4	Annisa Mukti	2022	0.3193	0.0259	0.0283	0.6715	Sehat
		2023	0.3334	0.0299	0.0304	0.7082	Sehat
		2024	0.3704	0.0157	0.0157	0.7214	Sehat
5	Unawi Barokah	2022	0.5181	-0.1238	-0.1222	0.4924	Sehat
		2023	0.2914	0.0139	0.0167	0.5848	Sehat
		2024	0.2469	0.0182	0.0238	0.5260	Sehat
6	Lantabur Tebuireng	2022	0.0726	0.0318	0.0321	0.2844	Sehat
		2023	0.0768	0.0342	0.0346	0.2995	Sehat
		2024	0.0730	0.0249	0.0262	0.2617	Sehat
7	Sampang Persoda	2022	0.0571	0.0092	0.0122	0.1824	Sehat
		2023	0.0236	0.0063	0.0173	0.1170	Sehat
		2024	0.0104	0.0066	0.0183	0.0965	Sehat
8	Sarana Prima Mandiri	2022	-0.5855	-0.7331	-0.5548	-3.3955	Berpotensi Bangkrut
		2023	0.1029	0.3264	0.3005	1.3331	Sehat
		2024	0.1030	-0.0057	-0.0061	0.2076	Sehat
9	Bhakti Semekar Perseroda	2022	0.1358	0.0138	0.0144	0.3280	Sehat
		2023	0.1244	0.0113	0.0133	0.3006	Sehat
		2024	0.1568	0.0137	0.0141	0.3622	Sehat
10	Bhakti Haji	2022	0.2585	0.0670	0.0579	0.7107	Sehat
		2023	0.3747	0.0536	0.0527	0.8569	Sehat
		2024	0.3907	0.0363	0.0421	0.8247	Sehat
11	Bumi Ranjani Kapanjen	2022	0.1455	0.0384	0.0393	0.4271	Sehat
		2023	0.8210	0.0388	0.0401	1.5430	Sehat

No.	BPRS	Tahun	X1	X2	ROA	Score	Keterangan
		2024	0.8458	0.0231	0.0234	1.5308	Sehat
12	Al Hijrah Tarbiyah	2022	-	-	-	-	-
		2023	-	-	-	-	-
		2024	0.1391	0.0208	0.0325	0.3568	Sehat
13	Daya Artha Mentari	2022	0.1021	0.0059	0.0066	0.2455	Sehat
		2023	0.0563	-0.0287	-0.0294	0.0527	Sehat
		2024	0.0726	0.0033	0.0036	0.1880	Sehat
14	Artha Pamenang	2022	0.1516	0.0381	0.0381	0.4364	Sehat
		2023	0.1554	0.0330	0.0399	0.4250	Sehat
		2024	0.1468	0.0305	0.0297	0.4027	Sehat
15	Rahma Syariah	2022	0.4354	0.0190	0.0169	0.8400	Sehat
		2023	0.5259	-0.0124	-0.0157	0.8827	Sehat
		2024	0.3752	0.0220	0.0219	0.7507	Sehat
16	Kabupaten Ngawi (Perseroda)	2022	0.1564	0.0241	0.0383	0.3964	Sehat
		2023	0.1288	0.0283	0.0380	0.3652	Sehat
		2024	0.1272	0.0296	0.0366	0.3672	Sehat
17	Magetan (Perseroda)	2022	0.2703	0.0319	0.0352	0.6110	Sehat
		2023	0.2753	0.0249	0.0212	0.5956	Sehat
		2024	0.2666	0.0180	0.0163	0.5579	Sehat
18	Al Maburr Badadan	2022	0.0695	0.0220	0.0186	0.2462	Sehat
		2023	0.0863	0.0071	0.0071	0.2234	Sehat
		2024	0.1041	0.0078	0.0103	0.2551	Sehat
19	Mitra Mentari Sejahtera	2022	-0.1137	0.0193	0.1366	-0.0671	Berpotensi Bangkrut
		2023	-0.1043	0.0088	0.0667	-0.0861	Berpotensi Bangkrut
		2024	-0.0810	0.0031	0.0030	-0.0662	Berpotensi Bangkrut
20	Madinah	2022	0.2590	-0.0070	-0.1242	0.4625	Sehat
		2023	0.2167	-0.0764	-0.0755	0.1558	Sehat
		2024	0.3241	-0.0152	-0.0155	0.5402	Sehat
21	Situbondo	2022	0.2714	0.0163	0.0269	0.5601	Sehat
		2023	0.2581	0.0153	0.0172	0.5347	Sehat
		2024	0.2063	-0.0108	-0.0107	0.3609	Sehat
22	Artha Sinar Sejahtera Syariah	2022	0.2781	0.0322	0.0401	0.6249	Sehat
		2023	0.2423	0.0389	0.0454	0.5886	Sehat
		2024	0.2656	0.0441	0.0443	0.6444	Sehat

No.	BPRS	Tahun	X1	X2	ROA	Score	Keterangan
23	Karya Mugi Santoso	2022	0.1259	0.0142	0.0162	0.3128	Sehat
		2023	0.1207	0.0166	0.0190	0.3125	Sehat
		2024	0.1160	0.0162	0.0209	0.3033	Sehat
24	Mitra Harmoni Kota Malang	2022	0.1928	0.0143	0.0123	0.4238	Sehat
		2023	0.2266	0.0173	0.0182	0.4895	Sehat
		2024	0.2147	0.0274	0.0300	0.5040	Sehat
25	Tanmiya Artha	2022	0.2829	0.0590	0.0512	0.7240	Sehat
		2023	0.3062	0.0458	0.0258	0.7178	Sehat
		2024	0.3395	0.0356	0.0343	0.7379	Sehat
26	Tunas Artha Jaya	2022	-	-	-	-	-
		2023	-	-	-	-	-
		2024	0.1330	0.0165	0.0169	0.3321	Sehat

L. Bukti Hasil SPSS

STATISTIK DESKRIPTIF

Altman

2022

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
WCTA	24	-0.5855	0.8653	0.182262	0.2532814
RETA	24	-0.8404	0.1081	-0.032329	0.2059953
EBITTA	24	-0.7331	0.0670	-0.014583	0.1568260
MVEBVTD	24	-0.3572	1.1448	0.303671	0.2802594
Valid N (listwise)	24				

2023

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
WCTA	24	-0.1043	0.8916	0.232733	0.2367603
RETA	24	-0.3843	0.1496	0.000046	0.1126121
EBITTA	24	-0.0764	0.3264	0.027808	0.0691899
MVEBVTD	24	0.0644	1.1608	0.300588	0.2320148

Valid N (listwise)	24				
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2024

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
WCTA	26	-0.0810	0.8458	0.198385	0.1799305
RETA	26	-0.3541	0.0877	0.008142	0.0905153
EBITTA	26	-0.0178	0.0441	0.013304	0.0169634
MVEBVTD	26	0.0493	0.6642	0.278404	0.1679406
Valid N (listwise)	26				

Zmijewski

2022



Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	24	-0.5548	0.1366	-0.006004	0.1274909
LEVERAGE	24	0.4662	1.5557	0.802892	0.1947480
LIKUIDITY	24	0.6215	16.5539	1.894267	3.1369476
Valid N (listwise)	24				

PADANG

2023

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	24	-0.0755	0.3005	0.038850	0.0797725
LEVERAGE	24	0.4628	0.9395	0.786946	0.1087170
LIKUIDITY	24	0.8744	23.2167	2.177517	4.4891973
Valid N (listwise)	24				

2024

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
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ROA	26	-0.0179	0.0443	0.016219	0.0171259
LEVERAGE	26	0.6009	0.9530	0.794131	0.0949159
LIKUIDITY	26	0.9032	1.6566	1.242123	0.2028473
Valid N (listwise)	26				

Grover

2022

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
WCTA	24	-0.5855	0.8653	0.182262	0.2532814
EBITTA	24	-0.7331	0.0670	-0.014583	0.1568260
ROA	24	-0.5548	0.1366	-0.006004	0.1274909
Valid N (listwise)	24				

2023

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
WCTA	24	-0.1043	0.8916	0.232733	0.2367603
EBITTA	24	-0.0764	0.3264	0.027808	0.0691899
ROA	24	-0.0755	0.3005	0.038850	0.0797725
Valid N (listwise)	24				

2024

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
WCTA	26	-0.0810	0.8458	0.198385	0.1799305
EBITTA	26	-0.0178	0.0441	0.013304	0.0169634

ROA	26	-0.0179	0.0443	0.016219	0.0171259
Valid N (listwise)	26				

UJI NORMALITAS

2022

One-Sample Kolmogorov-Smirnov Test

		Altman	Zmijewski	Grover
N		24	24	24
Normal Parameters ^{a,b}	Mean	1.311171	0.295954	0.308229
	Std. Deviation	3.1264588	1.5561149	0.8496293
Most Extreme Differences	Absolute	0.284	0.310	0.325
	Positive	0.197	0.310	0.229
	Negative	-0.284	-0.174	-0.325
Test Statistic		0.284	0.310	0.325
Asymp. Sig. (2-tailed) ^c		<0.001	<0.001	<0.001
Monte Carlo Sig. (2-tailed) ^d	Sig.	<0.001	<0.001	<0.001
	99% Confidence Interval			
	Lower Bound	0.000	0.000	0.000
		Upper Bound	0.000	0.000

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10,000 Monte Carlo samples with starting seed 2,000,000.

2023

One-Sample Kolmogorov-Smirnov Test

		Altman	Zmijewski	Grover
N		24	24	24
Normal Parameters ^{a,b}	Mean	1.895717	0.045796	0.533387
	Std. Deviation	1.5443951	0.6328522	0.4471835
Most Extreme Differences	Absolute	0.159	0.148	0.153
	Positive	0.159	0.077	0.153
	Negative	-0.077	-0.148	-0.093
Test Statistic		0.159	0.148	0.153

Asymp. Sig. (2-tailed) ^c			0.120	0.189	0.151
Monte Carlo Sig. (2-tailed) ^d	Sig.		0.118	0.190	0.150
	99% Confidence Interval	Lower Bound	0.110	0.180	0.141
		Upper Bound	0.127	0.200	0.159

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10,000 Monte Carlo samples with starting seed 926,214,481.

2024

One-Sample Kolmogorov-Smirnov Test

			Altman	Zmijewski	Grover
N			26	26	26
Normal Parameters ^{a,b}	Mean		1.709704	0.148565	0.429365
	Std. Deviation		1.4265463	0.5537774	0.3221433
Most Extreme Differences	Absolute		0.124	0.190	0.153
	Positive		0.124	0.100	0.153
	Negative		-0.080	-0.190	-0.074
Test Statistic			0.124	0.190	0.153
Asymp. Sig. (2-tailed) ^c			0.200 ^d	0.017	0.118
Monte Carlo Sig. (2-tailed) ^e	Sig.		0.372	0.016	0.113
	99% Confidence Interval	Lower Bound	0.359	0.013	0.105
		Upper Bound	0.384	0.019	0.121

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

e. Lilliefors' method based on 10,000 Monte Carlo samples with starting seed 1,502,173,562.

UJI BEDA

Uji Beda 2 Metode

UJI MAN WHITNEY 2022

Ranks

	Metode	N	Mean Rank	Sum of Ranks
Score	Altman	24	33.04	793.00
	Zmijewski	24	15.96	383.00
	Total	48		

Test Statistics^a

	Score
Mann-Whitney U	83.000
Wilcoxon W	383.000
Z	-4.227
Asymp. Sig. (2-tailed)	<0.001

a. Grouping Variable: Metode

Ranks

	Metode	N	Mean Rank	Sum of Ranks
Score	Altman	24	32.83	788.00
	Grover	24	16.17	388.00
	Total	48		

Test Statistics^a

	Score
Mann-Whitney U	88.000
Wilcoxon W	388.000
Z	-4.124
Asymp. Sig. (2-tailed)	<0.001

a. Grouping Variable: Metode

Ranks

	Metode	N	Mean Rank	Sum of Ranks
Score	Zmijewski	24	20.54	493.00
	Grover	24	28.46	683.00
	Total	48		

Test Statistics^a

	Score
Mann-Whitney U	193.000
Wilcoxon W	493.000
Z	-1.959
Asymp. Sig. (2-tailed)	0.050

a. Grouping Variable: Metode

INDEPENDEN SAMPLE TEST 2023

Group Statistics

	Metode	N	Mean	Std. Deviation	Std. Error Mean
Score	Altman	24	1.890704	1.5513394	0.3166658
	Zmijewski	24	0.295954	1.5561149	0.3176406

Independent Samples Test

t-test for Equality of Means

		t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				One-Sided p	Two-Sided p			Lower	Upper
Score	Equal variances assumed	3.575	46	<0.001	<0.001	1.5997625	0.4475233	0.6989449	2.5005801
	Equal variances not assumed	3.575	45.997	<0.001	<0.001	1.5997625	0.4475233	0.6989435	2.5005815

Group Statistics

	Metode	N	Mean	Std. Deviation	Std. Error Mean
Score	Altman	24	1.890704	1.5513394	0.3166658
	Grover	24	0.532125	0.4486802	0.0915865

Independent Samples Test

t-test for Equality of Means

		t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				One-Sided p	Two-Sided p			Lower	Upper
Score	Equal variances assumed	4.121	46	<0.001	<0.001	1.3585792	0.3296442	0.6950397	2.0221186
	Equal variances not assumed	4.121	26.821	<0.001	<0.001	1.3585792	0.3296442	0.6819939	2.0351644

Group Statistics

				Std.	Std. Error
	Metode	N	Mean	Deviation	Mean
Score	Zmijewski	24	0.295954	1.5561149	0.3176406
	Grover	24	0.532125	0.4486802	0.0915865



Independent Samples Test

t-test for Equality of Means

		t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				One-Sided p	Two-Sided p			Lower	Upper
Score	Equal variances assumed	-0.714	46	0.239	0.479	-0.2360833	0.3306305	-0.9016080	0.4294413
	Equal variances not assumed	-0.714	26.770	0.241	0.481	-0.2360833	0.3306305	-0.9147541	0.442587

UJI MAN WHITNEY 2024

Ranks

			Mean Rank	Sum of Ranks
	Metode	N		
Score	Altman	26	36.19	941.00
	Zmijewski	26	16.81	437.00
	Total	52		

Test Statistics^a

	Score
Mann-Whitney U	86.000
Wilcoxon W	437.000
Z	-4.612
Asymp. Sig. (2-tailed)	<0.001

a. Grouping Variable: Metode

INDEPENDEN SAMPLE TEST 2024

Group Statistics

	Metode	N	Mean	Std. Deviation	Std. Error Mean
Score	Altman	26	1.709704	1.4265463	0.2797687
	Grover	26	0.429365	0.3221433	0.0631775



Independent Samples Test

t-test for Equality of Means

				Significance				95% Confidence Interval of the Difference	
		t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Score	Equal variances assumed	4.464	50	<0.001	<0.001	1.2803385	0.2868134	0.7042567	1.8564202
	Equal variances not assumed	4.464	27.543	<0.001	<0.001	1.2803385	0.2868134	0.6923884	1.8682885

UJI MAN WHITNEY 2024

Ranks

	Metode	N	Mean Rank	Sum of Ranks
Score	Zmijewski	26	24.04	625.00
	Grover	26	28.96	753.00

Total	52		
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Test Statistics^a

	Score
Mann-Whitney U	274.000
Wilcoxon W	625.000
Z	-1.171
Asymp. Sig. (2-tailed)	0.241

a. Grouping Variable: Metode

UJI BEDA (ANOVA)

KRUSKALL WALLIS 2022

Ranks

	Metode	N	Mean Rank
Score	Altman	24	53.38
	Zmijewski	24	24.00
	Grover	24	32.13
	Total	72	

Test Statistics^{a,b}

	Score
Kruskal-Wallis H	25.214
df	2
Asymp. Sig.	<0.001

a. Kruskal Wallis Test

b. Grouping Variable:
Metode

HOMOGENITAS DAN KRUSKALL WALLIS 2023

HOMOGENITAS

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Score	Based on Mean	4.341	2	69	0.017
	Based on Median	3.769	2	69	0.028

Based on Median and with adjusted df	3.769	2	45.876	0.031
Based on trimmed mean	3.975	2	69	0.023

KRUSKALL WALLIS

Ranks

	Metode	N	Mean Rank
Score	Altman	24	52.75
	Zmijewski	24	23.08
	Grover	24	33.67
	Total	72	

Test Statistics^{a,b}

	Score
Kruskal-Wallis H	24.773
df	2
Asymp. Sig.	<0.001

a. Kruskal Wallis Test

b. Grouping Variable:
Metode

KRUSKALL WALLIS 2024

Ranks

	metode	N	Mean Rank
score	altman	26	57.62
	zmijewski	26	27.35
	grover	26	33.54
	Total	78	

Test Statistics^{a,b}

score

Kruskal-Wallis H	25.895
df	2
Asymp. Sig.	<0,001

a. Kruskal Wallis Test

b. Grouping Variable: metode



UIN IMAM BONJOL
PADANG