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## APPENDIX

### Calculation of Each Financial Distress Prediction Tools

<b>Indonesia Prima Property Tbk</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	17.834	27.666	8.503	6.538
X1 = Working capital/Total assets	0.002	0.023	-0.009	-0.071
X2= Retained Earnings/Total assets	0.709	0.698	0.661	0.624
X3= Earnings before interest and taxes/Total assets	0.014	0.014	0.004	0.009
X4= Book value equity/Book value of total debt	14.682	23.948	6.078	4.680
Springate <0.862	0.434	-0.194	-0.497	-0.234
A= Working Capital/Total Assets	0.002	0.023	-0.009	-0.071
B= Net Profit before Interest and Taxes/Total Assets	0.014	0.014	0.004	0.009
C= Net Profit before Taxes/Current Liabilities	0.568	-0.418	-0.767	-0.297
D= Sales/Total Asset	0.037	0.037	0.018	0.021
Zmijewski>0	-4.125	-4.060	-3.285	-3.142
X1= Profit After Tax/Total Assets	0.032	-0.014	-0.054	-0.041
X2= Total Debt/Total Assets	0.062	0.037	0.141	0.176
X3 = Current Assets/Current Liabilities	1.033	1.668	0.871	0.488

<b>Metropolitan Land Tbk</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score	6.878	6.368	6.722	6.570
X1 = Working capital/Total assets	0.361	0.366	0.338	0.311
X2= Retained Earnings/Total assets	0.416	0.422	0.471	0.486
X3= Earnings before interest and taxes/Total assets	0.163	0.120	0.099	0.095
X4= Book value equity/Book value of total debt	1.959	1.705	2.197	2.199
Springate	1.396	1.126	0.906	0.890
A= Working Capital/Total Assets	0.361	0.366	0.338	0.311
B= Net Profit before Interest and Taxes/Total Assets	0.163	0.120	0.099	0.095
C= Net Profit before Taxes/Current Liabilities	0.632	0.439	0.273	0.310
D= Sales/Total Asset	0.265	0.230	0.187	0.187
Zmijewski	-2.856	-2.593	-2.775	-2.825
X1= Profit After Tax/Total Assets	0.098	0.080	0.048	0.059
X2= Total Debt/Total Assets	0.338	0.370	0.313	0.313
X3 = Current Assets/Current Liabilities	3.078	2.775	2.635	2.434

<b>PT Puradelta Lestari Tbk</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score	30.751	12.696	9.008	11.021
X1 = Working capital/Total assets	0.438	0.385	0.381	0.403
X2= Retained Earnings/Total assets	0.959	0.853	0.048	0.024
X3= Earnings before interest and taxes/Total assets	0.077	0.195	0.239	0.138
X4= Book value equity/Book value of total debt	23.075	5.793	4.516	7.015
Springate	1.960	1.958	2.053	1.623
A= Working Capital/Total Assets	0.438	0.385	0.381	0.403
B= Net Profit before Interest and Taxes/Total Assets	0.077	0.195	0.239	0.138
C= Net Profit before Taxes/Current Liabilities	1.841	1.250	1.167	1.044
D= Sales/Total Asset	0.138	0.348	0.389	0.236
Zmijewski	-4.442	-4.295	-4.208	-4.163
X1= Profit After Tax/Total Assets	0.066	0.175	0.200	0.117
X2= Total Debt/Total Assets	0.042	0.147	0.181	0.125
X3 = Current Assets/Current Liabilities	12.769	3.711	3.207	4.519

<b>Pakuwon Jati Tbk (PWON)</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score	5.590	6.670	5.241	6.269
X1 = Working capital/Total assets	0.215	0.240	0.161	0.292
X2= Retained Earnings/Total assets	0.440	0.514	0.493	0.500
X3= Earnings before interest and taxes/Total assets	0.162	0.156	0.073	0.096
X4= Book value equity/Book value of total debt	1.577	2.262	1.986	1.980
Springate	1.291	1.475	0.626	1.016
A= Working Capital/Total Assets	0.215	0.240	0.161	0.292
B= Net Profit before Interest and Taxes/Total Assets	0.162	0.156	0.073	0.096
C= Net Profit before Taxes/Current Liabilities	0.697	0.970	0.265	0.518
D= Sales/Total Asset	0.283	0.276	0.150	0.198
Zmijewski	-2.636	-3.153	-2.620	-2.674
X1= Profit After Tax/Total Assets	0.113	0.124	0.042	0.054
X2= Total Debt/Total Assets	0.388	0.307	0.335	0.336
X3 = Current Assets/Current Liabilities	2.312	2.859	1.981	3.794

<b>PT Bekasi Asri Pemula Tbk (BAPA)</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score	9.087	25.953	23.887	25.888
X1 = Working capital/Total assets	0.470	0.714	0.705	0.713
X2= Retained Earnings/Total assets	0.416	0.509	0.503	0.499
X3= Earnings before interest and taxes/Total assets	0.094	0.102	0.034	0.029
X4= Book value equity/Book value of total debt	3.822	18.019	16.571	18.463
Springate	0.941	1.887	0.528	0.647
A= Working Capital/Total Assets	0.470	0.714	0.705	0.713
B= Net Profit before Interest and Taxes/Total Assets	0.094	0.102	0.034	0.029
C= Net Profit before Taxes/Current Liabilities	0.150	1.165	-0.497	-0.294
D= Sales/Total Asset	0.171	0.169	0.067	0.044
Zmijewski	-3.293	-4.286	-3.945	-4.033
X1= Profit After Tax/Total Assets	0.029	0.035	-0.026	-0.015
X2= Total Debt/Total Assets	0.207	0.053	0.057	0.051
X3 = Current Assets/Current Liabilities	3.373	24.882	14.471	15.548



<b>Kawasan Industri Jababeka Tbk</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score	6.233	5.987	6.028	6.149
X1 = Working capital/Total assets	0.597	0.586	0.585	0.595
X2= Retained Earnings/Total assets	0.164	0.168	0.160	0.158
X3= Earnings before interest and taxes/Total assets	0.100	0.069	0.083	0.089
X4= Book value equity/Book value of total debt	1.056	1.073	1.054	1.076
Springate	1.064	0.972	0.956	1.017
A= Working Capital/Total Assets	0.597	0.586	0.585	0.595
B= Net Profit before Interest and Taxes/Total Assets	0.100	0.069	0.083	0.089
C= Net Profit before Taxes/Current Liabilities	0.075	0.124	0.027	0.076
D= Sales/Total Asset	0.230	0.185	0.196	0.203
Zmijewski	-1.612	-1.657	-1.596	-1.643
X1= Profit After Tax/Total Assets	0.006	0.012	0.004	0.007
X2= Total Debt/Total Assets	0.486	0.482	0.487	0.482
X3 = Current Assets/Current Liabilities	7.147	6.118	6.179	6.544

<b>PT Binakarya Jaya Abadi Tbk.</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	4.539	4.405	0.860	1.676
X1 = Working capital/Total assets	0.511	0.522	0.135	0.146
X2= Retained Earnings/Total assets	0.044	0.030	-0.021	-0.001
X3= Earnings before interest and taxes/Total assets	0.094	0.076	0.022	0.115
X4= Book value equity/Book value of total debt	0.393	0.352	-0.098	-0.047
Springate <0.862	0.838	0.755	0.195	0.627
A= Working Capital/Total Assets	0.511	0.522	0.135	0.146
B= Net Profit before Interest and Taxes/Total Assets	0.094	0.076	0.022	0.115
C= Net Profit before Taxes/Current Liabilities	-0.079	-0.127	-0.043	0.086
D= Sales/Total Asset	0.189	0.167	0.042	0.169
Zmijewski>0	0.187	0.032	2.127	1.364
X1= Profit After Tax/Total Assets	-0.021	-0.035	-0.032	0.063
X2= Total Debt/Total Assets	0.778	0.740	1.108	1.050
X3 = Current Assets/Current Liabilities	2.900	2.915	1179	1.197

<b>Metro Realty Tbk</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	6.933	3.296	1.917	3.199
X1 = Working capital/Total assets	0.158	0.104	0.109	0.290
X2= Retained Earnings/Total assets	0.022	-0.099	-0.219	-0.263
X3= Earnings before interest and taxes/Total assets	0.077	0.074	0.032	0.076
X4= Book value equity/Book value of total debt	5.053	2.325	1.621	1.568
Springate <0.862	-0.107	0.191	0.009	0.687
A= Working Capital/Total Assets	0.158	0.104	0.109	0.290
B= Net Profit before Interest and Taxes/Total Assets	0.077	0.074	0.032	0.076
C= Net Profit before Taxes/Current Liabilities	-0.993	-0.453	-0.496	0.002
D= Sales/Total Asset	0.373	0.387	0.314	0.386
Zmijewski>0	-2.986	-2.147	-1.624	-1.919
X1= Profit After Tax/Total Assets	-0.092	-0.106	-0.120	-0.045
X2= Total Debt/Total Assets	0.165	0.301	0.381	0.389
X3 = Current Assets/Current Liabilities	3.478	1.651	1.546	2.299

<b>PT Maha Properti Indonesia Tbk.</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	-0.680	0.410	2.732	2.300
X1 = Working capital/Total assets	-0.179	-0.152	-0.160	-0.185
X2= Retained Earnings/Total assets	-0.035	-0.021	-0.016	-0.024
X3= Earnings before interest and taxes/Total assets	0.007	0.070	0.039	0.015
X4= Book value equity/Book value of total debt	0.531	0.961	3.406	3.324
Springate <0.862	-0.192	0.157	0.009	-0.148
A= Working Capital/Total Assets	-0.179	-0.152	-0.160	-0.185
B= Net Profit before Interest and Taxes/Total Assets	0.007	0.070	0.039	0.015
C= Net Profit before Taxes/Current Liabilities	-0.058	0.092	0.040	-0.030
D= Sales/Total Asset	0.021	0.098	0.072	0.038
Zmijewski>0	-2.233	-3.126	-3.070	-2.977
X1= Profit After Tax/Total Assets	-0.021	0.018	0.007	-0.008
X2= Total Debt/Total Assets	0.352	0.226	0.227	0.231
X3 = Current Assets/Current Liabilities	0.492	0.322	0.290	0.196

<b>PT Trimitra Propertindo Tbk.</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	6.330	4.006	1.962	1.769
X1 = Working capital/Total assets	0.316	0.057	0.008	0.004
X2= Retained Earnings/Total assets	0.051	0.053	-0.002	-0.003
X3= Earnings before interest and taxes/Total assets	0.038	0.031	0.001	0.002
X4= Book value equity/Book value of total debt	3.654	3.099	1.817	1.655
Springate <0.862	0.795	0.198	-0.041	-0.019
A= Working Capital/Total Assets	0.316	0.057	0.008	0.004
B= Net Profit before Interest and Taxes/Total Assets	0.038	0.031	0.001	0.002
C= Net Profit before Taxes/Current Liabilities	0.475	0.027	-0.083	-0.049
D= Sales/Total Asset	0.098	0.067	0.004	0.005
Zmijewski>0	-3.283	-2.963	-4.125	-4.141
X1= Profit After Tax/Total Assets	0.035	0.004	-0.002	-0.001
X2= Total Debt/Total Assets	0.215	0.244	0.035	0.033
X3 = Current Assets/Current Liabilities	5.005	1.286	1.286	1.153

<b>Indonesian Paradise Property Tbk.</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	2.567	6.000	4,823	2,077
X1 = Working capital/Total assets	0.003	0.064	0,072	0,139
X2= Retained Earnings/Total assets	0.096	0.336	0,281	0,246
X3= Earnings before interest and taxes/Total assets	0.071	0.071	0,032	0,028
X4= Book value equity/Book value of total debt	1.670	3.818	3,062	0,170
Springate <0.862	0.383	4.191	-1.459	0.176
A= Working Capital/Total Assets	0.003	0.064	0.072	0.139
B= Net Profit before Interest and Taxes/Total Assets	0.071	0.071	0.032	0.028
C= Net Profit before Taxes/Current Liabilities	0.177	5.852	-2.506	-0.107
D= Sales/Total Asset	0.111	0.113	0.052	0.049
Zmijewski>0	-2.279	-4.329	-2.657	-2.356
X1= Profit After Tax/Total Assets	0.018	0.260	-0.063	-0.003
X2= Total Debt/Total Assets	0.375	0.208	0.246	0.346
X3 = Current Assets/Current Liabilities	1.031	2.427	3.711	3.405

<b>Gowa Makassar Tourism Development Tbk.</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	3.492	5.241	4.655	4.348
X1 = Working capital/Total assets	0.103	0.160	0.133	0.189
X2= Retained Earnings/Total assets	0.565	0.572	0.535	0.467
X3= Earnings before interest and taxes/Total assets	0.093	0.087	0.076	0.067
X4= Book value equity/Book value of total debt	0.336	1.654	1.454	1.080
Springate <0.862	0.586	0.345	0.230	0.391
A= Working Capital/Total Assets	0.103	0.160	0.133	0.189
B= Net Profit before Interest and Taxes/Total Assets	0.093	0.087	0.076	0.067
C= Net Profit before Taxes/Current Liabilities	0.178	-0.247	-0.315	-0.094
D= Sales/Total Asset	0.196	0.186	0.170	0.129
Zmijewski>0	-2.332	-1.904	-1.530	-1.480
X1= Profit After Tax/Total Assets	0.049	-0.063	-0.107	-0.026
X2= Total Debt/Total Assets	0.390	0.377	0.408	0.481
X3 = Current Assets/Current Liabilities	1.371	1.630	1.392	1.700

<b>Bakrieland Development Tbk.</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	4.292	3.822	2.909	2.581
X1 = Working capital/Total assets	0.186	0.131	0.019	0.007
X2= Retained Earnings/Total assets	0.091	0.042	0.020	0.003
X3= Earnings before interest and taxes/Total assets	0.031	0.030	0.016	0.016
X4= Book value equity/Book value of total debt	2.448	2.503	2.490	2.306
Springate <0.862	1.028	0.038	0.002	0.016
A= Working Capital/Total Assets	0.186	0.131	0.019	0.007
B= Net Profit before Interest and Taxes/Total Assets	0.031	0.030	0.016	0.016
C= Net Profit before Taxes/Current Liabilities	1.077	-0.334	-0.131	-0.101
D= Sales/Total Asset	0.081	0.079	0.052	0.067
Zmijewski>0	-3.589	-2.412	-2.577	-2.504
X1= Profit After Tax/Total Assets	0.201	-0.066	-0.028	-0.023
X2= Total Debt/Total Assets	0.290	0.285	0.287	0.303
X3 = Current Assets/Current Liabilities	1.995	1.662	1.089	1.029



<b>PT Capri Nusa Satu Properti Tbk.</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	3.852	5.504	6,696	7,559
X1 = Working capital/Total assets	0.102	0.308	0,237	0,252
X2= Retained Earnings/Total assets	-0.308	-0.275	-0,317	-0,348
X3= Earnings before interest and taxes/Total assets	0.005	0.008	0,004	0,002
X4= Book value equity/Book value of total debt	3.956	4.119	5,858	6,695
Springate <0.862	-1.199	-0.137	0.094	-0.212
A= Working Capital/Total Assets	0.102	0.308	0.237	0.252
B= Net Profit before Interest and Taxes/Total Assets	0.005	0.008	0.004	0.002
C= Net Profit before Taxes/Current Liabilities	-2.007	-0.735	-0.254	-0.733
D= Sales/Total Asset	0.014	0.013	0.017	0.017
Zmijewski>0	-1.885	-2.918	-3.449	-3.554
X1= Profit After Tax/Total Assets	-0.289	-0.069	-0.016	-0.018
X2= Total Debt/Total Assets	0.202	0.196	0.146	0.130
X3 = Current Assets/Current Liabilities	1.710	4.397	5.250	11.820

<b>PT Andalan Sakti Primaindo Tbk</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	13.428	39.161	8.525	8.626
X1 = Working capital/Total assets	0.968	0.888	0.930	0.950
X2= Retained Earnings/Total assets	0.012	-0.051	-0.041	-0.046
X3= Earnings before interest and taxes/Total assets	0.153	0.046	0.005	0.021
X4= Book value equity/Book value of total debt	5.727	31.607	2.405	2.291
Springate <0.862	3.179	0.391	0.689	1.159
A= Working Capital/Total Assets	0.968	0.888	0.930	0.950
B= Net Profit before Interest and Taxes/Total Assets	0.153	0.046	0.005	0.021
C= Net Profit before Taxes/Current Liabilities	2.107	-1.112	-0.443	0.142
D= Sales/Total Asset	0.807	0.168	0.019	0.058
Zmijewski>0	-3.650	-2.749	-2.620	-2.713
X1= Profit After Tax/Total Assets	0.000	-0.062	-0.024	0.007
X2= Total Debt/Total Assets	0.149	0.240	0.294	0.304
X3 = Current Assets/Current Liabilities	41.472	16.932	18.061	21.207

<b>PT Bhakti Agung Propertindo Tbk</b>				
<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Altman Z-Score <1.1	5.998	9.206	8.314	7.789
X1 = Working capital/Total assets	0.910	0.949	0.922	0.886
X2= Retained Earnings/Total assets	-0.018	-0.003	-0.018	-0.019
X3= Earnings before interest and taxes/Total assets	0.007	0.010	0.007	0.002
X4= Book value equity/Book value of total debt	0.042	2.787	2.170	1.922
X5= Sales/Total assets	0.022	0.030	0.021	0.008
Springate <0.862	0.974	1.103	0.950	0.915
A= Working Capital/Total Assets	0.910	0.949	0.922	0.886
B= Net Profit before Interest and Taxes/Total Assets	0.007	0.010	0.007	0.002
C= Net Profit before Taxes/Current Liabilities	0.012	0.128	-0.043	-0.012
D= Sales/Total Asset	0.022	0.030	0.021	0.008
Zmijewski>0	1.096	-2.932	-2.565	-2.408
X1= Profit After Tax/Total Assets	0.000	0.007	-0.004	-0.002
X2= Total Debt/Total Assets	0.960	0.264	0.315	0.342
X3 = Current Assets/Current Liabilities	11.086	19.529	12.806	8.804