

LAMPIRAN

Lampiran 1

Rekapitulasi Data Fama-French Three Factor Model

Keterangan:

$$ER_i = -53,57 - 16,74 (R_m - R_f) + 0,0016 \text{ SMB}_t + 0,018 \text{ HML}_t$$

Tahun	Perusahaan	Rata-Rata ER	Rm-Rf	SMB (B/M)	HML
2017	BBCA	0,0033	1,341	-0,8610	-0,0425
	BBNI	0,0057	-0,045	-1,2917	0,1312
	BBRI	0,0050	-0,047	-1,0236	-0,0308
	BMRi	0,0040	-0,045	-0,5960	-0,0374
	BTPN	-0,0005	0,301	-0,5456	-0,1018
2018	BBCA	0,0012	-0,044	-0,8528	0,0971
	BBNI	-0,0006	-0,047	-1,4858	-0,0346
	BBRI	-0,0001	-0,046	-2,2366	-0,0360
	BMRI	-0,0010	-0,047	-0,7858	-0,0446
	BTPN	-0,0003	0,003	-0,9636	-0,0943
2019	BBCA	0,0015	-0,041	-2,1202	-0,5441
	BBNI	-0,0014	-0,044	-1,7840	-0,0187
	BBRI	0,0015	-0,049	-2,2575	-0,0488
	BMRi	0,0003	-0,047	-1,1164	-0,0366
	BTPN	-0,0017	-0,045	-1,1686	-0,0247
2020	BBCA	0,0004	-0,055	-0,9544	-0,1135
	BBNI	-0,0013	-0,039	-1,3607	-0,0714
	BBRI	-0,0006	-0,039	-1,8435	-0,0928
	BMRi	-0,0016	-0,040	-0,3687	-0,0922
	BTPN	0,0009	-0,045	-0,9421	-0,0846

Lampiran 2

Data Stock Retrurns

Keterangan:

$$\text{Stock Return (Rm)} = (\text{Pt} - \text{Pt-1})/\text{Pt-1}$$

Tahun	BBCA			BBNI		
	Close Price	LOG	Stock Retrurns	Close Price	LOG	Stock Retrurns
2017	15.300	4,185		5.700	3,756	
	15.450	4,189	0,001	6.250	3,796	0,011
	16.550	4,219	0,007	6.475	3,811	0,004
	17.750	4,249	0,007	6.375	3,804	-0,002
	17.150	4,234	-0,004	6.550	3,816	0,003
	18.150	4,259	0,006	6.600	3,820	0,001
	18.700	4,272	0,003	7.450	3,872	0,014
	18.950	4,278	0,001	7.350	3,866	-0,002
	20.300	4,307	0,007	7.400	3,869	0,001
	20.900	4,320	0,003	7.600	3,881	0,003
	20.350	4,309	-0,003	8.100	3,908	0,007
21.900	4,340	0,007	9.900	3,996	0,022	
2018	22.725	4,357		9.400	3,973	
	23.175	4,365	0,002	9.725	3,988	0,004
	23.300	4,367	0,001	8.675	3,938	-0,012
	22.100	4,344	-0,005	8.050	3,906	-0,008
	22.700	4,356	0,003	8.475	3,928	0,006
	21.475	4,332	-0,006	7.050	3,848	-0,020
	23.275	4,367	0,008	7.400	3,869	0,005
	24.800	4,394	0,006	7.800	3,892	0,006
	24.150	4,383	-0,003	7.400	3,869	-0,006
	23.650	4,374	-0,002	7.325	3,865	-0,001
	26.050	4,416	0,010	8.500	3,929	0,017
26.000	4,415	0,000	8.800	3,944	0,004	
2019	28.175	4,450		9.075	3,958	
	27.575	4,441	-0,002	8.800	3,944	-0,003
	27.550	4,440	0,000	9.400	3,973	0,007
	28.750	4,459	0,004	9.600	3,982	0,002
	29.100	4,464	0,001	8.400	3,924	-0,015
	29.975	4,477	0,003	9.200	3,964	0,010
	30.950	4,491	0,003	8.475	3,928	-0,009
	30.500	4,484	-0,001	7.700	3,886	-0,011

	30.350	4,482	0,000	7.350	3,866	-0,005
	31.450	4,498	0,003	7.675	3,885	0,005
	31.400	4,497	0,000	7.500	3,875	-0,003
	33.425	4,524	0,006	7.850	3,895	0,005
2020	32.400	4,511		7.200	3,857	
	31.450	4,498	-0,003	7.025	3,847	-0,003
	27.625	4,441	-0,013	3.820	3,582	-0,069
	25.850	4,412	-0,006	4.100	3,613	0,009
	25.950	4,414	0,000	3.830	3,583	-0,008
	28.475	4,454	0,009	4.580	3,661	0,022
	31.200	4,494	0,009	4.600	3,663	0,001
	31.375	4,497	0,001	5.100	3,708	0,012
	27.100	4,433	-0,014	4.440	3,647	-0,016
	28.950	4,462	0,006	4.740	3,676	0,008
	31.025	4,492	0,007	6.000	3,778	0,028
	33.850	4,530	0,008	6.175	3,791	0,003

Tahun	BBRI			BMRI		
	Close Price	LOG	Stock Retruns	Close Price	LOG	Stock Retruns
2017	2.345	3,370		5.450	3,736	
	2.390	3,378	0,002	5.650	3,752	0,004
	2.595	3,414	0,011	5.850	3,767	0,004
	2.580	3,412	-0,001	5.850	3,767	0,000
	2.895	3,462	0,015	6.300	3,799	0,009
	3.050	3,484	0,007	6.375	3,804	0,001
	2.955	3,471	-0,004	6.825	3,834	0,008
	3.025	3,481	0,003	6.550	3,816	-0,005
	3.055	3,485	0,001	6.725	3,828	0,003
	3.120	3,494	0,003	7.050	3,848	0,005
	3.210	3,507	0,004	7.400	3,869	0,005
	3.640	3,561	0,016	8.000	3,903	0,009
2018	3.700	3,568		8.150	3,911	
	3.780	3,577	0,003	8.300	3,919	0,002
	3.600	3,556	-0,006	7.675	3,885	-0,009
	3.220	3,508	-0,014	7.125	3,853	-0,008
	3.080	3,489	-0,006	7.050	3,848	-0,001
	2.840	3,453	-0,010	6.850	3,836	-0,003
	3.070	3,487	0,010	6.650	3,823	-0,003
	3.180	3,502	0,004	6.900	3,839	0,004
	3.150	3,498	-0,001	6.725	3,828	-0,003

	3.150	3,498	0,000	6.850	3,836	0,002
	3.620	3,559	0,017	7.400	3,869	0,009
	3.660	3,563	0,001	7.375	3,868	0,000
2019	3.850	3,585		7.450	3,872	
	3.850	3,585	0,000	7.125	3,853	-0,005
	4.110	3,614	0,008	7.475	3,874	0,005
	4.370	3,640	0,007	7.725	3,888	0,004
	4.100	3,613	-0,008	7.675	3,885	-0,001
	4.360	3,639	0,007	8.025	3,904	0,005
	4.480	3,651	0,003	7.975	3,902	-0,001
	4.270	3,630	-0,006	7.250	3,860	-0,011
	4.120	3,615	-0,004	6.975	3,844	-0,004
	4.210	3,624	0,003	7.025	3,847	0,001
	4.090	3,612	-0,003	6.975	3,844	-0,001
4.400	3,643	0,009	7.675	3,885	0,011	
2020	4.460	3,649		7.550	3,878	
	4.190	3,622	-0,007	7.275	3,862	-0,004
	3.020	3,480	-0,039	4.680	3,670	-0,050
	2.730	3,436	-0,013	4.460	3,649	-0,006
	2.950	3,470	0,010	4.470	3,650	0,000
	3.030	3,481	0,003	4.950	3,695	0,012
	3.160	3,500	0,005	5.800	3,763	0,019
	3.510	3,545	0,013	5.950	3,775	0,003
	3.040	3,483	-0,018	4.960	3,695	-0,021
	3.360	3,526	0,012	5.775	3,762	0,018
	4.090	3,612	0,024	6.325	3,801	0,011
4.170	3,620	0,002	6.325	3,801	0,000	

Tahun	BTPN		
	Close Price	LOG	Stock Retrurns
2017	2.580	3,412	
	2.830	3,452	0,012
	2.730	3,436	-0,005
	2.610	3,417	-0,006
	2.490	3,396	-0,006
	2.480	3,394	-0,001
	2.520	3,401	0,002
	2.550	3,407	0,002
	2.550	3,407	0,000
	2.550	3,407	0,000

	2.440	3,387	-0,006
	2.460	3,391	0,001
2018	3.560	3,551	
	3.530	3,548	-0,001
	3.350	3,525	-0,006
	2.930	3,467	-0,017
	3.650	3,562	0,028
	4.000	3,602	0,011
	3.860	3,587	-0,004
	4.020	3,604	0,005
	3.740	3,573	-0,009
	3.670	3,565	-0,002
	3.560	3,551	-0,004
	3.440	3,537	-0,004
2019	3.790	3,579	
	3.700	3,568	-0,003
	3.600	3,556	-0,003
	3.710	3,569	0,004
	3.670	3,565	-0,001
	3.620	3,559	-0,002
	3.310	3,520	-0,011
	3.250	3,512	-0,002
	3.250	3,512	0,000
	3.200	3,505	-0,002
	3.150	3,498	-0,002
	3.250	3,512	0,004
2020	2.910	3,464	
	2.710	3,433	-0,009
	1.910	3,281	-0,044
	1.820	3,260	-0,006
	1.840	3,265	0,001
	2.160	3,334	0,021
	2.290	3,360	0,008
	2.370	3,375	0,004
	2.150	3,332	-0,013
	2.280	3,358	0,008
	2.600	3,415	0,017
	3.110	3,493	0,023

Lampiran 3

Market Factor (X1)

Keterangan:

$$MKT_t = R_m - R_f$$

Date	Close IHSG	Retrun Market	Rf	Rm-Rf
12/1/2016	5,296			
1/1/2017	5.294	4,144	4,25%	4,101
2/1/2017	5.387	0,002	4,25%	-0,040
3/1/2017	5.568	0,004	4,25%	-0,039
4/1/2017	5.685	0,002	4,50%	-0,043
5/1/2017	5.738	0,001	4,75%	-0,046
6/1/2017	5.830	0,002	4,75%	-0,046
7/1/2017	5.841	0,000	4,75%	-0,047
8/1/2017	5.864	0,000	4,75%	-0,047
9/1/2017	5.901	0,001	4,75%	-0,047
10/1/2017	6.006	0,002	4,75%	-0,045
11/1/2017	5.952	-0,001	4,75%	-0,049
12/1/2017	6.356	0,008	4,75%	-0,040
1/1/2018	6.606	0,004	4,25%	-0,038
2/1/2018	6.597	0,000	4,25%	-0,043
3/1/2018	6.189	-0,007	4,25%	-0,050
4/1/2018	5.995	-0,004	4,25%	-0,046
5/1/2018	5.984	0,000	4,50%	-0,045
6/1/2018	5.799	-0,004	4,75%	-0,051
7/1/2018	5.936	0,003	4,75%	-0,045
8/1/2018	6.018	0,002	4,75%	-0,046
9/1/2018	5.977	-0,001	4,75%	-0,048
10/1/2018	5.832	-0,003	4,75%	-0,050
11/1/2018	6.056	0,004	4,75%	-0,043
12/1/2018	6.194	0,003	4,75%	-0,045

1/1/2019	6.533	0,006	4,25%	-0,036
2/1/2019	6.443	-0,002	4,25%	-0,044
3/1/2019	6.469	0,000	4,25%	-0,042
4/1/2019	6.455	0,000	4,25%	-0,043
5/1/2019	6.209	-0,004	4,25%	-0,047
6/1/2019	6.359	0,003	4,50%	-0,042
7/1/2019	6.391	0,001	4,75%	-0,047
8/1/2019	6.328	-0,001	4,75%	-0,049
9/1/2019	6.169	-0,003	4,75%	-0,050
10/1/2019	6.228	0,001	4,75%	-0,046
11/1/2019	6.012	-0,004	4,75%	-0,052
12/1/2019	6.300	0,005	4,75%	-0,042
1/1/2020	5.940	-0,007	4,25%	-0,049
2/1/2020	5.453	-0,010	4,25%	-0,052
3/1/2020	4.539	-0,021	4,25%	-0,064
4/1/2020	4.716	0,005	4,25%	-0,038
5/1/2020	4.754	0,001	4,25%	-0,042
6/1/2020	4.905	0,004	4,25%	-0,039
7/1/2020	5.150	0,006	4,50%	-0,039
8/1/2020	5.238	0,002	4,75%	-0,046
9/1/2020	4.870	-0,009	4,75%	-0,056
10/1/2020	5.128	0,006	4,75%	-0,041
11/1/2020	5.612	0,011	4,75%	-0,037
12/1/2020	5.979	0,007	4,75%	-0,040

Lampiran 4

Size Factor (X2)

Keterangan:

Size = Harga Saham per lembar \times Jumlah Saham Beredar

Tahun	BBCA			BBNI		
		LOG	Market Size		LOG	Market Size
2017	15.300	4,185	103.215.455.988	5.700	3,756	68.955.288.040
	15.450	4,189	103.319.962.941	6.250	3,796	69.689.755.388
	16.550	4,219	104.056.694.811	6.475	3,811	69.971.749.970
	17.750	4,249	104.806.519.977	6.375	3,804	69.847.648.647
	17.150	4,234	104.438.166.970	6.550	3,816	70.063.574.582
	18.150	4,259	105.045.234.652	6.600	3,820	70.124.208.707
	18.700	4,272	105.365.015.944	7.450	3,872	71.090.135.157
	18.950	4,278	105.507.274.047	7.350	3,866	70.982.385.557
	20.300	4,307	106.244.432.850	7.400	3,869	71.036.442.368
	20.900	4,320	106.556.451.348	7.600	3,881	71.249.077.610
	20.350	4,309	106.270.784.346	8.100	3,908	71.757.106.036
21.900	4,340	107.057.097.497	9.900	3,996	73.357.123.528	
2018	22.725	4,357	107.453.212.059	9.400	3,973	72.943.904.175
	23.175	4,365	107.663.255.607	9.725	3,988	73.214.919.904
	23.300	4,367	107.720.877.466	8.675	3,938	72.303.928.391
	22.100	4,344	107.154.478.874	8.050	3,906	71.707.735.296
	22.700	4,356	107.441.421.328	8.475	3,928	72.117.952.636
	21.475	4,332	106.847.175.019	7.050	3,848	70.650.114.605
	23.275	4,367	107.709.377.864	7.400	3,869	71.036.442.368
	24.800	4,394	108.389.194.652	7.800	3,892	71.456.189.229
	24.150	4,383	108.104.694.966	7.400	3,869	71.036.442.368
	23.650	4,374	107.880.588.932	7.325	3,865	70.955.219.095
	26.050	4,416	108.915.941.760	8.500	3,929	72.141.438.217
26.000	4,415	108.895.361.777	8.800	3,944	72.417.998.277	
2019	28.175	4,450	24.665.010.000	9.075	3,958	72.663.351.451
	27.575	4,441	109.525.359.733	8.800	3,944	72.417.998.277
	27.550	4,440	109.515.643.744	9.400	3,973	72.943.904.175
	28.750	4,459	109.972.347.133	9.600	3,982	73.111.770.354
	29.100	4,464	110.101.965.212	8.400	3,924	72.047.077.956
	29.975	4,477	110.419.310.233	9.200	3,964	72.772.427.694

	30.950	4,491	110.762.189.922	8.475	3,928	72.117.952.636
	30.500	4,484	110.605.300.380	7.700	3,886	71.353.305.878
	30.350	4,482	110.552.489.044	7.350	3,866	70.982.385.557
	31.450	4,498	110.933.858.303	7.675	3,885	71.327.376.265
	31.400	4,497	110.916.814.739	7.500	3,875	71.143.468.794
	33.425	4,524	111.586.266.715	7.850	3,895	71.507.137.319
2020	32.400	4,511	111.252.637.782	7.200	3,857	70.817.980.784
	31.450	4,498	110.933.858.303	7.025	3,847	70.621.790.067
	27.625	4,441	109.544.765.314	3.820	3,582	65.764.228.165
	25.850	4,412	108.833.383.527	4.100	3,613	66.328.235.375
	25.950	4,414	108.874.742.180	3.830	3,583	65.785.073.533
	28.475	4,454	109.869.392.513	4.580	3,661	67.210.980.986
	31.200	4,494	110.848.368.003	4.600	3,663	67.245.723.302
	31.375	4,497	110.908.282.777	5.100	3,708	68.068.447.231
	27.100	4,433	109.339.231.889	4.440	3,647	66.963.451.382
	28.950	4,462	110.046.606.548	4.740	3,676	67.484.770.942
	31.025	4,492	110.788.116.222	6.000	3,778	69.364.267.378
	33.850	4,530	111.721.609.966	6.175	3,791	69.593.496.484

Tahun	BBRI			BMRI		
		LOG	Market Size		LOG	Market Size
2017	2.345	3,370	83.138.599.857	5.450	3,736	174.365.170.100
	2.390	3,378	83.342.245.119	5.650	3,752	175.095.594.225
	2.595	3,414	84.223.907.678	5.850	3,767	175.800.607.078
	2.580	3,412	84.161.799.209	5.850	3,767	175.800.607.078
	2.895	3,462	85.395.969.313	6.300	3,799	177.302.558.968
	3.050	3,484	85.954.757.193	6.375	3,804	177.542.408.819
	2.955	3,471	85.615.744.833	6.825	3,834	178.924.790.594
	3.025	3,481	85.866.578.252	6.550	3,816	178.091.260.660
	3.055	3,485	85.972.306.224	6.725	3,828	178.625.640.132
	3.120	3,494	86.197.865.733	7.050	3,848	179.582.158.787
	3.210	3,507	86.502.540.698	7.400	3,869	180.564.146.914
	3.640	3,561	87.849.386.932	8.000	3,903	182.144.199.386
2018	3.700	3,568	88.024.546.380	8.150	3,911	182.520.688.401
	3.780	3,577	88.253.724.764	8.300	3,919	182.890.310.971
	3.600	3,556	87.731.002.512	7.675	3,885	181.303.657.920
	3.220	3,508	86.535.864.772	7.125	3,853	179.796.627.199
	3.080	3,489	86.059.622.771	7.050	3,848	179.582.158.787
	2.840	3,453	85.190.469.568	6.850	3,836	178.998.893.330
	3.070	3,487	86.024.781.501	6.650	3,823	178.398.343.441

	3.180	3,502	86.401.942.016	6.900	3,839	179.146.290.895
	3.150	3,498	86.300.389.778	6.725	3,828	178.625.640.132
	3.150	3,498	86.300.389.778	6.850	3,836	178.998.893.330
	3.620	3,559	87.790.358.237	7.400	3,869	180.564.146.914
	3.660	3,563	87.908.092.180	7.375	3,868	180.495.561.144
2019	3.850	3,585	88.450.311.581	7.450	3,872	180.700.626.055
	3.850	3,585	88.450.311.581	7.125	3,853	179.796.627.199
	4.110	3,614	89.150.449.346	7.475	3,874	180.768.522.520
	4.370	3,640	89.807.626.327	7.725	3,888	181.435.262.771
	4.100	3,613	89.124.350.232	7.675	3,885	181.303.657.920
	4.360	3,639	89.783.081.801	8.025	3,904	182.207.435.244
	4.480	3,651	90.073.968.834	7.975	3,902	182.080.765.608
	4.270	3,630	89.559.613.378	7.250	3,860	180.149.106.967
	4.120	3,615	89.176.485.036	6.975	3,844	179.365.396.551
	4.210	3,624	89.408.002.156	7.025	3,847	179.510.161.994
	4.090	3,612	89.098.187.384	6.975	3,844	179.365.396.551
4.400	3,643	89.880.924.316	7.675	3,885	181.303.657.920	
2020	4.460	3,649	90.026.032.822	7.550	3,878	180.970.857.736
	4.190	3,622	89.356.984.531	7.275	3,862	180.218.873.218
	3.020	3,480	85.848.855.037	4.680	3,670	171.278.139.804
	2.730	3,436	84.767.252.998	4.460	3,649	170.302.293.400
	2.950	3,470	85.597.601.423	4.470	3,650	170.347.684.407
	3.030	3,481	85.884.272.196	4.950	3,695	172.414.909.277
	3.160	3,500	86.334.347.590	5.800	3,763	175.626.639.693
	3.510	3,545	87.459.755.596	5.950	3,775	176.144.125.061
	3.040	3,483	85.919.572.660	4.960	3,695	172.455.811.563
	3.360	3,526	86.991.834.901	5.775	3,762	175.539.092.793
	4.090	3,612	89.098.187.384	6.325	3,801	177.382.824.720
	4.170	3,620	89.305.722.802	6.325	3,801	177.382.824.720

Tahun	BTPN		
		LOG	Market Size
2017	2.580	3,412	19.924.839.094
	2.830	3,452	20.159.424.333
	2.730	3,436	20.068.176.920
	2.610	3,417	19.954.162.017
	2.490	3,396	19.834.779.769

	2.480	3,394	19.824.572.896
	2.520	3,401	19.865.156.234
	2.550	3,407	19.895.173.206
	2.550	3,407	19.895.173.206
	2.550	3,407	19.895.173.206
	2.440	3,387	19.783.329.637
	2.460	3,391	19.804.035.095
2018	3.560	3,551	20.741.488.167
	3.530	3,548	20.720.023.403
	3.350	3,525	20.587.274.267
	2.930	3,467	20.247.502.785
	3.650	3,562	20.804.813.622
	4.000	3,602	21.037.065.066
	3.860	3,587	20.946.700.132
	4.020	3,604	21.049.715.489
	3.740	3,573	20.866.596.489
	3.670	3,565	20.818.673.791
	3.560	3,551	20.741.488.167
	3.440	3,537	20.654.517.206
2019	3.790	3,579	29.162.076.370
	3.700	3,568	29.077.022.040
	3.600	3,556	28.980.056.115
	3.710	3,569	29.086.574.096
	3.670	3,565	29.048.210.199

	3.620	3,559	28.999.663.007
	3.310	3,520	28.682.827.952
	3.250	3,512	28.618.087.705
	3.250	3,512	28.618.087.705
	3.200	3,505	28.563.217.849
	3.150	3,498	28.507.483.865
	3.250	3,512	28.618.087.705
2020	2.910	3,464	28.227.017.577
	2.710	3,433	27.975.022.561
	1.910	3,281	26.736.907.527
	1.820	3,260	26.566.089.849
	1.840	3,265	26.604.768.210
	2.160	3,334	27.172.226.435
	2.290	3,360	27.379.060.357
	2.370	3,375	27.500.584.222
	2.150	3,332	27.155.803.970
	2.280	3,358	27.363.572.215
	2.600	3,415	27.828.374.902
	3.110	3,493	28.462.255.967

Lampiran 5

Size per perusahaan dan kelompoknya

BBCA					
Tanggal	Size	Tanggal	Rangking	Median	Posisi
1/1/2017	4,185	12/1/2017	4,340	4,265	B
2/1/2017	4,189	11/1/2017	4,320		B
3/1/2017	4,219	10/1/2017	4,309		B
4/1/2017	4,234	9/1/2017	4,307		B
5/1/2017	4,249	8/1/2017	4,278		B
6/1/2017	4,259	7/1/2017	4,272		B
7/1/2017	4,272	6/1/2017	4,259		S
8/1/2017	4,278	5/1/2017	4,249		S
9/1/2017	4,307	4/1/2017	4,234		S
10/1/2017	4,309	3/1/2017	4,219		S
11/1/2017	4,320	2/1/2017	4,189		S
12/1/2017	4,340	1/1/2017	4,185		S
1/1/2018	4,357	11/1/2018	4,416	4,367	B
2/1/2018	4,365	12/1/2018	4,415		B
3/1/2018	4,367	8/1/2018	4,394		B
4/1/2018	4,344	9/1/2018	4,383		B
5/1/2018	4,356	10/1/2018	4,374		B
6/1/2018	4,332	3/1/2018	4,367		B
7/1/2018	4,367	7/1/2018	4,367		B
8/1/2018	4,394	2/1/2018	4,365		S
9/1/2018	4,383	1/1/2018	4,357		S
10/1/2018	4,374	5/1/2018	4,356		S
11/1/2018	4,416	4/1/2018	4,344		S
12/1/2018	4,415	6/1/2018	4,332		S
1/1/2019	4,450	12/1/2019	4,524	4,479	B
2/1/2019	4,441	10/1/2019	4,498		B
3/1/2019	4,440	11/1/2019	4,497		B
4/1/2019	4,459	7/1/2019	4,491		B
5/1/2019	4,464	8/1/2019	4,484		B
6/1/2019	4,477	9/1/2019	4,482		B
7/1/2019	4,491	6/1/2019	4,477		S
8/1/2019	4,484	5/1/2019	4,464		S
9/1/2019	4,482	4/1/2019	4,459		S
10/1/2019	4,498	1/1/2019	4,450		S
11/1/2019	4,497	2/1/2019	4,441		S
12/1/2019	4,524	3/1/2019	4,440		S

1/1/2020	4,511	12/1/2020	4,530	4,477	B
2/1/2020	4,498	1/1/2020	4,511		B
3/1/2020	4,441	2/1/2020	4,498		B
4/1/2020	4,412	8/1/2020	4,497		B
5/1/2020	4,414	7/1/2020	4,494		B
6/1/2020	4,454	11/1/2020	4,492		B
7/1/2020	4,494	10/1/2020	4,462		S
8/1/2020	4,497	6/1/2020	4,454		S
9/1/2020	4,433	3/1/2020	4,441		S
10/1/2020	4,462	9/1/2020	4,433		S
11/1/2020	4,492	5/1/2020	4,414		S
12/1/2020	4,530	4/1/2020	4,412		S

BBNI					
Tanggal	Size	Tanggal	Rangking	Median	Posisi
1/1/2017	3,756	12/1/2017	3,996	3,843	B
2/1/2017	3,796	11/1/2017	3,908		B
3/1/2017	3,811	10/1/2017	3,881		B
4/1/2017	3,804	7/1/2017	3,872		B
5/1/2017	3,816	9/1/2017	3,869		B
6/1/2017	3,820	8/1/2017	3,866		B
7/1/2017	3,872	6/1/2017	3,820		S
8/1/2017	3,866	5/1/2017	3,816		S
9/1/2017	3,869	3/1/2017	3,811		S
10/1/2017	3,881	4/1/2017	3,804		S
11/1/2017	3,908	2/1/2017	3,796		S
12/1/2017	3,996	1/1/2017	3,756		S
1/1/2018	3,973	2/1/2018	3,988	3,917	B
2/1/2018	3,988	1/1/2018	3,973		B
3/1/2018	3,938	12/1/2018	3,944		B
4/1/2018	3,906	3/1/2018	3,938		B
5/1/2018	3,928	11/1/2018	3,929		B
6/1/2018	3,848	5/1/2018	3,928		B
7/1/2018	3,869	4/1/2018	3,906		S
8/1/2018	3,892	8/1/2018	3,892		S
9/1/2018	3,869	7/1/2018	3,869		S
10/1/2018	3,865	9/1/2018	3,869		S
11/1/2018	3,929	10/1/2018	3,865		S
12/1/2018	3,944	6/1/2018	3,848		S
1/1/2019	3,958	4/1/2019	3,982	3,926	B
2/1/2019	3,944	3/1/2019	3,973		B
3/1/2019	3,973	6/1/2019	3,964		B

4/1/2019	3,982	1/1/2019	3,958		B	
5/1/2019	3,924	2/1/2019	3,944		B	
6/1/2019	3,964	7/1/2019	3,928		B	
7/1/2019	3,928	5/1/2019	3,924		S	
8/1/2019	3,886	12/1/2019	3,895		S	
9/1/2019	3,866	9/1/2019	3,886		S	
10/1/2019	3,885	10/1/2019	3,885		S	
11/1/2019	3,875	11/1/2019	3,875		S	
12/1/2019	3,895	8/1/2019	3,866		S	
1/1/2020	3,857	1/1/2020	3,857		3,669	B
2/1/2020	3,847	2/1/2020	3,847			B
3/1/2020	3,582	12/1/2020	3,791	B		
4/1/2020	3,613	11/1/2020	3,778	B		
5/1/2020	3,583	8/1/2020	3,708	B		
6/1/2020	3,661	10/1/2020	3,676	B		
7/1/2020	3,663	7/1/2020	3,663	S		
8/1/2020	3,708	6/1/2020	3,661	S		
9/1/2020	3,647	9/1/2020	3,647	S		
10/1/2020	3,676	4/1/2020	3,613	S		
11/1/2020	3,778	5/1/2020	3,583	S		
12/1/2020	3,791	3/1/2020	3,582	S		

BBRI					
Tanggal	Size	Tanggal	Rangking	Median	Posisi
1/1/2017	3,370	12/1/2017	3,561	3,476	B
2/1/2017	3,378	11/1/2017	3,507		B
3/1/2017	3,414	10/1/2017	3,494		B
4/1/2017	3,412	9/1/2017	3,485		B
5/1/2017	3,462	6/1/2017	3,484		B
6/1/2017	3,484	8/1/2017	3,481		B
7/1/2017	3,471	7/1/2017	3,471		S
8/1/2017	3,481	5/1/2017	3,462		S
9/1/2017	3,485	3/1/2017	3,414		S
10/1/2017	3,494	4/1/2017	3,412		S
11/1/2017	3,507	2/1/2017	3,378		S
12/1/2017	3,561	1/1/2017	3,370		S
1/1/2018	3,568	2/1/2018	3,577	3,505	B
2/1/2018	3,577	1/1/2018	3,568		B
3/1/2018	3,556	12/1/2018	3,563		B
4/1/2018	3,508	11/1/2018	3,559		B
5/1/2018	3,489	3/1/2018	3,556		B
6/1/2018	3,453	4/1/2018	3,508		B

7/1/2018	3,487	8/1/2018	3,502		S
8/1/2018	3,502	9/1/2018	3,498		S
9/1/2018	3,498	10/1/2018	3,498		S
10/1/2018	3,498	5/1/2018	3,489		S
11/1/2018	3,559	7/1/2018	3,487		S
12/1/2018	3,563	6/1/2018	3,453		S
1/1/2019	3,585	7/1/2019	3,651	3,620	B
2/1/2019	3,585	12/1/2019	3,643		B
3/1/2019	3,614	4/1/2019	3,640		B
4/1/2019	3,640	6/1/2019	3,639		B
5/1/2019	3,613	8/1/2019	3,630		B
6/1/2019	3,639	10/1/2019	3,624		B
7/1/2019	3,651	9/1/2019	3,615		S
8/1/2019	3,630	3/1/2019	3,614		S
9/1/2019	3,615	5/1/2019	3,613		S
10/1/2019	3,624	11/1/2019	3,612		S
11/1/2019	3,612	1/1/2019	3,585		S
12/1/2019	3,643	2/1/2019	3,585		S
1/1/2020	3,649	1/1/2020	3,649	3,513	B
2/1/2020	3,622	2/1/2020	3,622		B
3/1/2020	3,480	12/1/2020	3,620		B
4/1/2020	3,436	11/1/2020	3,612		B
5/1/2020	3,470	8/1/2020	3,545		B
6/1/2020	3,481	10/1/2020	3,526		B
7/1/2020	3,500	7/1/2020	3,500		S
8/1/2020	3,545	9/1/2020	3,483		S
9/1/2020	3,483	6/1/2020	3,481		S
10/1/2020	3,526	3/1/2020	3,480		S
11/1/2020	3,612	5/1/2020	3,470		S
12/1/2020	3,620	4/1/2020	3,436		S

BMRI					
Tanggal	Size	Tanggal	Rangking		Posisi
1/1/2017	3,736	12/1/2017	3,903		B
2/1/2017	3,752	11/1/2017	3,869		B
3/1/2017	3,767	10/1/2017	3,848		B
4/1/2017	3,767	7/1/2017	3,834		B
5/1/2017	3,799	9/1/2017	3,828		B
6/1/2017	3,804	8/1/2017	3,816		B
7/1/2017	3,834	6/1/2017	3,804		S
8/1/2017	3,816	5/1/2017	3,799		S
9/1/2017	3,828	3/1/2017	3,767		S

10/1/2017	3,848	4/1/2017	3,767	S
11/1/2017	3,869	2/1/2017	3,752	S
12/1/2017	3,903	1/1/2017	3,736	S
1/1/2018	3,911	2/1/2018	3,919	B
2/1/2018	3,919	1/1/2018	3,911	B
3/1/2018	3,885	3/1/2018	3,885	B
4/1/2018	3,853	11/1/2018	3,869	B
5/1/2018	3,848	12/1/2018	3,868	B
6/1/2018	3,836	4/1/2018	3,853	B
7/1/2018	3,823	5/1/2018	3,848	S
8/1/2018	3,839	8/1/2018	3,839	S
9/1/2018	3,828	6/1/2018	3,836	S
10/1/2018	3,836	10/1/2018	3,836	S
11/1/2018	3,869	9/1/2018	3,828	S
12/1/2018	3,868	7/1/2018	3,823	S
1/1/2019	3,872	6/1/2019	3,904	B
2/1/2019	3,853	7/1/2019	3,902	B
3/1/2019	3,874	4/1/2019	3,888	B
4/1/2019	3,888	5/1/2019	3,885	B
5/1/2019	3,885	12/1/2019	3,885	B
6/1/2019	3,904	3/1/2019	3,874	B
7/1/2019	3,902	1/1/2019	3,872	S
8/1/2019	3,860	8/1/2019	3,860	S
9/1/2019	3,844	2/1/2019	3,853	S
10/1/2019	3,847	10/1/2019	3,847	S
11/1/2019	3,844	9/1/2019	3,844	S
12/1/2019	3,885	11/1/2019	3,844	S
1/1/2020	3,878	1/1/2020	3,878	B
2/1/2020	3,862	2/1/2020	3,862	B
3/1/2020	3,670	11/1/2020	3,801	B
4/1/2020	3,649	12/1/2020	3,801	B
5/1/2020	3,650	8/1/2020	3,775	B
6/1/2020	3,695	7/1/2020	3,763	B
7/1/2020	3,763	10/1/2020	3,762	B
8/1/2020	3,775	6/1/2020	3,695	S
9/1/2020	3,695	9/1/2020	3,695	S
10/1/2020	3,762	3/1/2020	3,670	S
11/1/2020	3,801	5/1/2020	3,650	S
12/1/2020	3,801	4/1/2020	3,649	S

BTPN					
Tanggal	Size	Tanggal	Rangking	Median	Posisi
1/1/2017	3,412	2/1/2017	3,452	3,407	B
2/1/2017	3,452	3/1/2017	3,436		B
3/1/2017	3,436	4/1/2017	3,417		B
4/1/2017	3,417	1/1/2017	3,412		B
5/1/2017	3,396	8/1/2017	3,407		B
6/1/2017	3,394	9/1/2017	3,407		B
7/1/2017	3,401	10/1/2017	3,407		B
8/1/2017	3,407	7/1/2017	3,401		S
9/1/2017	3,407	5/1/2017	3,396		S
10/1/2017	3,407	6/1/2017	3,394		S
11/1/2017	3,387	12/1/2017	3,391		S
12/1/2017	3,391	11/1/2017	3,387		S
1/1/2018	3,551	8/1/2018	3,604	3,557	B
2/1/2018	3,548	6/1/2018	3,602		B
3/1/2018	3,525	7/1/2018	3,587		B
4/1/2018	3,467	9/1/2018	3,573		B
5/1/2018	3,562	10/1/2018	3,565		B
6/1/2018	3,602	5/1/2018	3,562		B
7/1/2018	3,587	1/1/2018	3,551		S
8/1/2018	3,604	11/1/2018	3,551		S
9/1/2018	3,573	2/1/2018	3,548		S
10/1/2018	3,565	12/1/2018	3,537		S
11/1/2018	3,551	3/1/2018	3,525		S
12/1/2018	3,537	4/1/2018	3,467		S
1/1/2019	3,579	1/1/2019	3,579	3,538	B
2/1/2019	3,568	4/1/2019	3,569		B
3/1/2019	3,556	2/1/2019	3,568		B
4/1/2019	3,569	5/1/2019	3,565		B
5/1/2019	3,565	6/1/2019	3,559		
6/1/2019	3,559	3/1/2019	3,556		B
7/1/2019	3,520	7/1/2019	3,520		S
8/1/2019	3,512	8/1/2019	3,512		S
9/1/2019	3,512	9/1/2019	3,512		S
10/1/2019	3,505	12/1/2019	3,512		S
11/1/2019	3,498	10/1/2019	3,505		S
12/1/2019	3,512	11/1/2019	3,498		S
1/1/2020	3,464	12/1/2020	3,493	3,359	B
2/1/2020	3,433	1/1/2020	3,464		B
3/1/2020	3,281	2/1/2020	3,433		B

4/1/2020	3,260	11/1/2020	3,415	B
5/1/2020	3,265	8/1/2020	3,375	B
6/1/2020	3,334	7/1/2020	3,360	B
7/1/2020	3,360	10/1/2020	3,358	S
8/1/2020	3,375	6/1/2020	3,334	S
9/1/2020	3,332	9/1/2020	3,332	S
10/1/2020	3,358	3/1/2020	3,281	S
11/1/2020	3,415	5/1/2020	3,265	S
12/1/2020	3,493	12/1/2020	3,260	S

Lampiran 6

Book to Market Ratio (X3)

Keterangan:

Total Equity / Jumlah saham yang beredar x Closing Price

Tahun	BBCA		BBNI		BBRI	
	Book to Market	LOG	Book to Market	LOG	Book to Market	LOG
2017	6,740	0,829	7,747	0,889	10,698	1,029
	6,851	0,836	7,800	0,892	10,860	1,036
	7,031	0,847	8,029	0,905	11,107	1,046
	7,128	0,853	8,213	0,914	11,349	1,055
	7,219	0,859	8,264	0,917	11,289	1,053
	7,293	0,863	8,389	0,924	11,395	1,057
	7,284	0,862	8,291	0,919	11,462	1,059
	7,303	0,864	8,336	0,921	11,474	1,060
	7,298	0,863	8,382	0,923	11,532	1,062
	7,406	0,870	8,506	0,930	11,706	1,068
	7,360	0,867	8,370	0,923	11,560	1,063
7,801	0,892	8,743	0,942	12,156	1,085	
2018	9,329	0,970	9,996	1,000	13,904	1,143
	9,299	0,968	9,945	0,998	13,849	1,141
	8,719	0,940	9,448	0,975	13,070	1,116
	8,490	0,929	9,228	0,965	12,835	1,108
	8,452	0,927	9,158	0,962	12,883	1,110
	8,236	0,916	9,060	0,957	12,612	1,101
	8,363	0,922	9,223	0,965	12,785	1,107
	8,426	0,926	9,296	0,968	12,905	1,111
	8,390	0,924	9,287	0,968	12,832	1,108
	8,204	0,914	9,072	0,958	12,521	1,098
	8,438	0,926	9,265	0,967	12,781	1,107
8,632	0,936	9,440	0,975	13,054	1,116	
2019	46,125	1,664	11,239	1,051	13,685	1,136
	10,244	1,010	11,122	1,046	13,496	1,130
	10,286	1,012	11,086	1,045	13,444	1,129
	10,222	1,010	11,037	1,043	13,317	1,124
	9,820	0,992	10,773	1,032	12,908	1,111
	10,029	1,001	10,923	1,038	13,122	1,118
	10,048	1,002	11,078	1,044	13,146	1,119
	9,963	0,998	11,086	1,045	13,091	1,117

	9,717	0,988	10,864	1,036	12,817	1,108
	9,777	0,990	10,915	1,038	12,906	1,111
	9,439	0,975	10,563	1,024	12,502	1,097
	9,832	0,993	11,013	1,042	12,986	1,113
2020	9,862	0,994	9,467	0,976	12,225	1,087
	9,080	0,958	8,715	0,940	11,306	1,053
	7,654	0,884	7,790	0,892	9,796	0,991
	8,004	0,903	8,025	0,904	10,308	1,013
	8,066	0,907	8,157	0,912	10,290	1,012
	8,246	0,916	8,237	0,916	10,581	1,025
	8,582	0,934	8,644	0,937	11,052	1,043
	8,724	0,941	8,686	0,939	11,096	1,045
	8,227	0,915	8,209	0,914	10,502	1,021
	8,607	0,935	8,577	0,933	10,922	1,038
	9,357	0,971	9,132	0,961	11,670	1,067
	9,885	0,995	9,697	0,987	12,404	1,094

Tahun	BMRI		BTPN	
	Book to Market	LOG	Book to Market	LOG
2017	5,162	0,713	4,570	0,660
	5,230	0,719	4,596	0,662
	5,384	0,731	4,772	0,679
	5,498	0,740	4,901	0,690
	5,502	0,741	4,976	0,697
	5,583	0,747	5,058	0,704
	5,550	0,744	5,058	0,704
	5,598	0,748	5,070	0,705
	5,616	0,749	5,102	0,708
	5,686	0,755	5,193	0,715
	5,604	0,748	5,175	0,714
	5,932	0,773	5,521	0,742

2018	6,694	0,826	6,167	0,790
	6,672	0,824	6,165	0,790
	6,314	0,800	5,821	0,765
	6,167	0,790	5,734	0,758
	6,163	0,790	5,570	0,746
	5,992	0,778	5,338	0,727
	6,154	0,789	5,488	0,739
	6,213	0,793	5,536	0,743
	6,189	0,792	5,547	0,744
	6,026	0,780	5,425	0,734
	6,203	0,793	5,654	0,752
	6,347	0,803	5,807	0,764
2019	7,557	0,878	7,050	0,848
	7,491	0,875	6,974	0,843
	7,481	0,874	7,025	0,847
	7,437	0,871	6,984	0,844
	7,159	0,855	6,727	0,828
	7,295	0,863	6,901	0,839
	7,337	0,866	7,012	0,846
	7,343	0,866	6,959	0,843
	7,189	0,857	6,784	0,831
	7,252	0,860	6,862	0,836
	7,006	0,845	6,637	0,822
	7,264	0,861	6,928	0,841

2020	6,361	0,804	6,937	0,841
	5,864	0,768	6,426	0,808
	5,136	0,711	5,596	0,748
	5,367	0,730	5,852	0,767
	5,408	0,733	5,890	0,770
	5,513	0,741	5,951	0,775
	5,683	0,755	6,201	0,792
	5,763	0,761	6,279	0,798
	5,473	0,738	5,912	0,772
	5,661	0,753	6,178	0,791
	6,131	0,788	6,648	0,823
	6,532	0,815	6,925	0,840

Lampiran 7

Book to Market Ratio dan kelompoknya

BBCA					
Tanggal	Book to Market	Tanggal	Rangking	Percentile	Posisi
1/1/2017	6,740	12/1/2017	7,801	7,302	H
2/1/2017	6,851	10/1/2017	7,406		H
3/1/2017	7,031	11/1/2017	7,360		H
4/1/2017	7,128	8/1/2017	7,303		H
5/1/2017	7,219	9/1/2017	7,298		M
6/1/2017	7,293	6/1/2017	7,293		M
7/1/2017	7,284	7/1/2017	7,284	7,155	M
8/1/2017	7,303	5/1/2017	7,219		M
9/1/2017	7,298	4/1/2017	7,128		L
10/1/2017	7,406	3/1/2017	7,031		L
11/1/2017	7,360	2/1/2017	6,851		L
12/1/2017	7,801	1/1/2017	6,740		L
1/1/2018	9,329	1/1/2018	9,329	8,589	H
2/1/2018	9,299	2/1/2018	9,299		H
3/1/2018	8,719	3/1/2018	8,719		H
4/1/2018	8,490	12/1/2018	8,632		H
5/1/2018	8,452	4/1/2018	8,490		M
6/1/2018	8,236	5/1/2018	8,452		M
7/1/2018	8,363	11/1/2018	8,438	8,401	M
8/1/2018	8,426	8/1/2018	8,426		M
9/1/2018	8,390	9/1/2018	8,390		L
10/1/2018	8,204	7/1/2018	8,363		L
11/1/2018	8,438	6/1/2018	8,236		L
12/1/2018	8,632	10/1/2018	8,204		L
1/1/2019	46,125	1/1/2019	46,125	10,170	H
2/1/2019	10,244	3/1/2019	10,286		H
3/1/2019	10,286	2/1/2019	10,244		H
4/1/2019	10,222	4/1/2019	10,222		H
5/1/2019	9,820	7/1/2019	10,048		M
6/1/2019	10,029	6/1/2019	10,029		M
7/1/2019	10,048	8/1/2019	9,963	9,824	M
8/1/2019	9,963	12/1/2019	9,832		M
9/1/2019	9,717	5/1/2019	9,820		L
10/1/2019	9,777	10/1/2019	9,777		L
11/1/2019	9,439	9/1/2019	9,717		L
12/1/2019	9,832	11/1/2019	9,439		L

1/1/2020	9,862	12/1/2020	9,885	8,973	H
2/1/2020	9,080	1/1/2020	9,862		H
3/1/2020	7,654	11/1/2020	9,357		H
4/1/2020	8,004	2/1/2020	9,080		H
5/1/2020	8,066	8/1/2020	8,724		M
6/1/2020	8,246	10/1/2020	8,607		M
7/1/2020	8,582	7/1/2020	8,582	8,233	M
8/1/2020	8,724	6/1/2020	8,246		M
9/1/2020	8,227	9/1/2020	8,227		M
10/1/2020	8,607	5/1/2020	8,066		L
11/1/2020	9,357	4/1/2020	8,004		L
12/1/2020	9,885	3/1/2020	7,654		L

BBNI					
Tanggal	Book to Market	Tanggal	Rangking	Percentile	Posisi
1/1/2017	7,747	12/1/2017	8,743	8,378	H
2/1/2017	7,800	10/1/2017	8,506		H
3/1/2017	8,029	6/1/2017	8,389		H
4/1/2017	8,213	9/1/2017	8,382		H
5/1/2017	8,264	11/1/2017	8,370		M
6/1/2017	8,389	8/1/2017	8,336		M
7/1/2017	8,291	7/1/2017	8,291	8,228	M
8/1/2017	8,336	5/1/2017	8,264		M
9/1/2017	8,382	4/1/2017	8,213		L
10/1/2017	8,506	3/1/2017	8,029		L
11/1/2017	8,370	2/1/2017	7,800		L
12/1/2017	8,743	1/1/2017	7,747		L
1/1/2018	9,996	1/1/2018	9,996	9,397	H
2/1/2018	9,945	2/1/2018	9,945		H
3/1/2018	9,448	3/1/2018	9,448		H
4/1/2018	9,228	12/1/2018	9,440		H
5/1/2018	9,158	8/1/2018	9,296		M
6/1/2018	9,060	9/1/2018	9,287		M
7/1/2018	9,223	11/1/2018	9,265	9,224	M
8/1/2018	9,296	4/1/2018	9,228		M
9/1/2018	9,287	7/1/2018	9,223		L
10/1/2018	9,072	5/1/2018	9,158		L
11/1/2018	9,265	10/1/2018	9,072		L
12/1/2018	9,440	6/1/2018	9,060		L
1/1/2019	11,239	1/1/2019	11,239	11,083	H
2/1/2019	11,122	2/1/2019	11,122		H

3/1/2019	11,086	3/1/2019	11,086		H
4/1/2019	11,037	8/1/2019	11,086		H
5/1/2019	10,773	7/1/2019	11,078		M
6/1/2019	10,923	4/1/2019	11,037		M
7/1/2019	11,078	12/1/2019	11,013	10,917	M
8/1/2019	11,086	6/1/2019	10,923		M
9/1/2019	10,864	10/1/2019	10,915		L
10/1/2019	10,915	9/1/2019	10,864		L
11/1/2019	10,563	5/1/2019	10,773		L
12/1/2019	11,013	11/1/2019	10,563		L
1/1/2020	9,467	12/1/2020	9,697	8,706	H
2/1/2020	8,715	1/1/2020	9,467		H
3/1/2020	7,790	11/1/2020	9,132		H
4/1/2020	8,025	2/1/2020	8,715		H
5/1/2020	8,157	8/1/2020	8,686		M
6/1/2020	8,237	7/1/2020	8,644		M
7/1/2020	8,644	10/1/2020	8,577	8,217	M
8/1/2020	8,686	6/1/2020	8,237		M
9/1/2020	8,209	9/1/2020	8,209		L
10/1/2020	8,577	5/1/2020	8,157		L
11/1/2020	9,132	4/1/2020	8,025		L
12/1/2020	9,697	3/1/2020	7,790		L

BBRI					
Tanggal	Book to Market	Tanggal	Rangking	Percentile	Posisi
1/1/2017	10,698	12/1/2017	12,156	11,514	H
2/1/2017	10,860	10/1/2017	11,706		H
3/1/2017	11,107	11/1/2017	11,560		H
4/1/2017	11,349	9/1/2017	11,532		H
5/1/2017	11,289	8/1/2017	11,474		M
6/1/2017	11,395	7/1/2017	11,462		M
7/1/2017	11,462	6/1/2017	11,395	11,307	M
8/1/2017	11,474	4/1/2017	11,349		M
9/1/2017	11,532	5/1/2017	11,289		L
10/1/2017	11,706	3/1/2017	11,107		L
11/1/2017	11,560	2/1/2017	10,860		L
12/1/2017	12,156	1/1/2017	10,698		L
1/1/2018	13,904	1/1/2018	13,904	13,010	H
2/1/2018	13,849	2/1/2018	13,849		H
3/1/2018	13,070	3/1/2018	13,070		H
4/1/2018	12,835	12/1/2018	13,054		H
5/1/2018	12,883	8/1/2018	12,905		M

6/1/2018	12,612	5/1/2018	12,883		M
7/1/2018	12,785	4/1/2018	12,835	12,799	M
8/1/2018	12,905	9/1/2018	12,832		M
9/1/2018	12,832	7/1/2018	12,785		L
10/1/2018	12,521	11/1/2018	12,781		L
11/1/2018	12,781	6/1/2018	12,612		L
12/1/2018	13,054	10/1/2018	12,521		L
1/1/2019	13,685	1/1/2019	13,685	13,266	H
2/1/2019	13,496	2/1/2019	13,496		H
3/1/2019	13,444	3/1/2019	13,444		H
4/1/2019	13,317	4/1/2019	13,317		H
5/1/2019	12,908	7/1/2019	13,146		M
6/1/2019	13,122	6/1/2019	13,122		M
7/1/2019	13,146	8/1/2019	13,091	12,931	M
8/1/2019	13,091	12/1/2019	12,986		M
9/1/2019	12,817	5/1/2019	12,908		L
10/1/2019	12,906	10/1/2019	12,906		L
11/1/2019	12,502	9/1/2019	12,817		L
12/1/2019	12,986	11/1/2019	12,502		L
1/1/2020	12,225	12/1/2020	12,404	11,243	H
2/1/2020	11,306	1/1/2020	12,225		H
3/1/2020	9,796	11/1/2020	11,670		H
4/1/2020	10,308	2/1/2020	11,306		H
5/1/2020	10,290	8/1/2020	11,096		M
6/1/2020	10,581	7/1/2020	11,052		M
7/1/2020	11,052	10/1/2020	10,922	10,526	M
8/1/2020	11,096	6/1/2020	10,581		M
9/1/2020	10,502	9/1/2020	10,502		L
10/1/2020	10,922	4/1/2020	10,308		L
11/1/2020	11,670	5/1/2020	10,290		L
12/1/2020	12,404	3/1/2020	9,796		L

BMRI					
Tanggal	Book to Market	Tanggal	Rangking	Percentile	Posisi
1/1/2017	5,162	12/1/2017	5,932	5,602	H
2/1/2017	5,230	10/1/2017	5,686		H
3/1/2017	5,384	9/1/2017	5,616		H
4/1/2017	5,498	11/1/2017	5,604		H
5/1/2017	5,502	8/1/2017	5,598		M
6/1/2017	5,583	6/1/2017	5,583		M
7/1/2017	5,550	7/1/2017	5,550	5,499	M

8/1/2017	5,598	5/1/2017	5,502		M
9/1/2017	5,616	4/1/2017	5,498		L
10/1/2017	5,686	3/1/2017	5,384		L
11/1/2017	5,604	2/1/2017	5,230		L
12/1/2017	5,932	1/1/2017	5,162		L
1/1/2018	6,694	1/1/2018	6,694	6,284	H
2/1/2018	6,672	2/1/2018	6,672		H
3/1/2018	6,314	12/1/2018	6,347		H
4/1/2018	6,167	3/1/2018	6,314		H
5/1/2018	6,163	8/1/2018	6,213		M
6/1/2018	5,992	11/1/2018	6,203		M
7/1/2018	6,154	9/1/2018	6,189	6,164	M
8/1/2018	6,213	4/1/2018	6,167		M
9/1/2018	6,189	5/1/2018	6,163		L
10/1/2018	6,026	7/1/2018	6,154		L
11/1/2018	6,203	10/1/2018	6,026		L
12/1/2018	6,347	6/1/2018	5,992		L
1/1/2019	7,557	1/1/2019	7,557	7,409	H
2/1/2019	7,491	2/1/2019	7,491		H
3/1/2019	7,481	3/1/2019	7,481		H
4/1/2019	7,437	4/1/2019	7,437		H
5/1/2019	7,159	8/1/2019	7,343		M
6/1/2019	7,295	7/1/2019	7,337		M
7/1/2019	7,337	6/1/2019	7,295	7,256	M
8/1/2019	7,343	12/1/2019	7,264		M
9/1/2019	7,189	10/1/2019	7,252		L
10/1/2019	7,252	9/1/2019	7,189		L
11/1/2019	7,006	5/1/2019	7,159		L
12/1/2019	7,264	11/1/2019	7,006		L
1/1/2020	6,361	12/1/2020	6,532	5,834	H
2/1/2020	5,864	1/1/2020	6,361		H
3/1/2020	5,136	11/1/2020	6,131		H
4/1/2020	5,367	2/1/2020	5,864		H
5/1/2020	5,408	8/1/2020	5,763		M
6/1/2020	5,513	7/1/2020	5,683		M
7/1/2020	5,683	10/1/2020	5,661	5,485	M
8/1/2020	5,763	6/1/2020	5,513		M
9/1/2020	5,473	9/1/2020	5,473		L
10/1/2020	5,661	5/1/2020	5,408		L
11/1/2020	6,131	4/1/2020	5,367		L
12/1/2020	6,532	3/1/2020	5,136		L

BTPN					
Tanggal	Book to Market	Tanggal	Rangking	Percentile	Posisi
1/1/2017	4,570	12/1/2017	5,521	5,092	H
2/1/2017	4,596	10/1/2017	5,193		H
3/1/2017	4,772	11/1/2017	5,175		H
4/1/2017	4,901	9/1/2017	5,102		H
5/1/2017	4,976	8/1/2017	5,070		M
6/1/2017	5,058	7/1/2017	5,058		M
7/1/2017	5,058	6/1/2017	5,058	4,923	M
8/1/2017	5,070	5/1/2017	4,976		M
9/1/2017	5,102	4/1/2017	4,901		L
10/1/2017	5,193	3/1/2017	4,772		L
11/1/2017	5,175	2/1/2017	4,596		L
12/1/2017	5,521	1/1/2017	4,570		L
1/1/2018	6,167	1/1/2018	6,167	5,785	H
2/1/2018	6,165	2/1/2018	6,165		H
3/1/2018	5,821	3/1/2018	5,821		H
4/1/2018	5,734	12/1/2018	5,807		H
5/1/2018	5,570	4/1/2018	5,734		M
6/1/2018	5,338	11/1/2018	5,654		M
7/1/2018	5,488	5/1/2018	5,570	5,539	M
8/1/2018	5,536	9/1/2018	5,547		M
9/1/2018	5,547	8/1/2018	5,536		L
10/1/2018	5,425	7/1/2018	5,488		L
11/1/2018	5,654	10/1/2018	5,425		L
12/1/2018	5,807	6/1/2018	5,338		L
1/1/2019	7,050	1/1/2019	7,050	6,981	H
2/1/2019	6,974	3/1/2019	7,025		H
3/1/2019	7,025	7/1/2019	7,012		H
4/1/2019	6,984	4/1/2019	6,984		H
5/1/2019	6,727	2/1/2019	6,974		M
6/1/2019	6,901	8/1/2019	6,959		M
7/1/2019	7,012	12/1/2019	6,928	6,874	M
8/1/2019	6,959	6/1/2019	6,901		M
9/1/2019	6,784	10/1/2019	6,862		L
10/1/2019	6,862	9/1/2019	6,784		L
11/1/2019	6,637	5/1/2019	6,727		L
12/1/2019	6,928	11/1/2019	6,637		L
1/1/2020	6,937	1/1/2020	6,937	6,382	H
2/1/2020	6,426	12/1/2020	6,925		H
3/1/2020	5,596	11/1/2020	6,648		H

4/1/2020	5,852	2/1/2020	6,426		H
5/1/2020	5,890	8/1/2020	6,279		M
6/1/2020	5,951	7/1/2020	6,201		M
7/1/2020	6,201	10/1/2020	6,178	5,923	M
8/1/2020	6,279	6/1/2020	5,951		M
9/1/2020	5,912	9/1/2020	5,912		L
10/1/2020	6,178	5/1/2020	5,890		L
11/1/2020	6,648	4/1/2020	5,852		L
12/1/2020	6,925	3/1/2020	5,596		L

Lampiran 8

Portofolio Perusahaan

BBCA								
Tahun	Size	Kategori	Tahun	B/M	Kategori	Portofolio size/B/M 2016		Log Portofolio
12/1/2017	4,340	B	12/1/2017	7,801	H	0,5564	BH	-0,2546
11/1/2017	4,320	B	11/1/2017	7,360	H	0,5870	BH	-0,2314
10/1/2017	4,309	B	10/1/2017	7,406	H	0,5817	BH	-0,2353
9/1/2017	4,307	B	9/1/2017	7,298	M	0,5902	BM	-0,2290
8/1/2017	4,278	B	8/1/2017	7,303	H	0,5857	BH	-0,2323
7/1/2017	4,272	B	7/1/2017	7,284	M	0,5864	BM	-0,2318
6/1/2017	4,259	S	6/1/2017	7,293	M	0,5840	SM	-0,2336
5/1/2017	4,249	S	5/1/2017	7,219	M	0,5886	SM	-0,2302
4/1/2017	4,234	S	4/1/2017	7,128	L	0,5941	SL	-0,2262
3/1/2017	4,219	S	3/1/2017	7,031	L	0,6000	SL	-0,2218
2/1/2017	4,189	S	2/1/2017	6,851	L	0,6114	SL	-0,2137
1/1/2017	4,185	S	1/1/2017	6,740	L	0,6209	SL	-0,2070
11/1/2018	4,416	B	11/1/2018	8,438	M	0,5233	BM	-0,2812
12/1/2018	4,415	B	12/1/2018	8,632	H	0,5115	BH	-0,2912
8/1/2018	4,394	B	8/1/2018	8,426	M	0,5216	BM	-0,2827
9/1/2018	4,383	B	9/1/2018	8,390	L	0,5224	BL	-0,2820
10/1/2018	4,374	B	10/1/2018	8,204	L	0,5331	BL	-0,2732

3/1/2018	4,367	B	3/1/2018	8,719	H	0,5009	BH	-0,3002
7/1/2018	4,367	B	7/1/2018	8,363	L	0,5221	BL	-0,2822
2/1/2018	4,365	S	2/1/2018	9,299	M	0,4694	SM	-0,3284
1/1/2018	4,357	S	1/1/2018	9,329	H	0,4670	SH	-0,3307
5/1/2018	4,356	S	5/1/2018	8,452	M	0,5154	SM	-0,2879
4/1/2018	4,344	S	4/1/2018	8,490	M	0,5117	SM	-0,2910
6/1/2018	4,332	S	6/1/2018	8,236	L	0,5260	SL	-0,2790
12/1/2019	4,524	B	12/1/2019	9,832	M	0,4601	BM	-0,3371
10/1/2019	4,498	B	10/1/2019	9,777	L	0,4600	BL	-0,3372
11/1/2019	4,497	B	11/1/2019	9,439	L	0,4764	BM	-0,3220
7/1/2019	4,491	B	7/1/2019	10,048	M	0,4469	BM	-0,3498
8/1/2019	4,484	B	8/1/2019	9,963	M	0,4501	BM	-0,3467
9/1/2019	4,482	B	9/1/2019	9,717	L	0,4612	BL	-0,3361
6/1/2019	4,477	S	6/1/2019	10,029	M	0,4464	SM	-0,3503
5/1/2019	4,464	S	5/1/2019	9,820	L	0,4545	SL	-0,3424
4/1/2019	4,459	S	4/1/2019	10,222	H	0,4362	SH	-0,3603
1/1/2019	4,450	S	1/1/2019	46,125	H	0,0965	SH	-1,0156
2/1/2019	4,441	S	2/1/2019	10,286	H	0,4317	SH	-0,3648
3/1/2019	4,440	S	3/1/2019	10,244	H	0,4334	SH	-0,3631
12/1/2020	4,530	B	12/1/2020	9,885	H	0,4582	BH	-0,3389
1/1/2020	4,511	B	1/1/2020	9,862	H	0,4574	BH	-0,3397
2/1/2020	4,498	B	2/1/2020	9,080	H	0,4953	BH	-0,3051
8/1/2020	4,497	B	8/1/2020	8,724	M	0,5154	BM	-0,2878
7/1/2020	4,494	B	7/1/2020	8,582	M	0,5237	BM	-0,2809

11/1/2020	4,492	B	11/1/2020	9,357	H	0,4800	BH	-0,3187
10/1/2020	4,462	S	10/1/2020	8,607	M	0,5183	SM	-0,2854
6/1/2020	4,454	S	6/1/2020	8,246	M	0,5402	SM	-0,2675
3/1/2020	4,441	S	3/1/2020	7,654	L	0,5803	SL	-0,2364
9/1/2020	4,433	S	9/1/2020	8,227	M	0,5388	SM	-0,2686
5/1/2020	4,414	S	5/1/2020	8,066	L	0,5473	SL	-0,2618
4/1/2020	4,412	S	4/1/2020	8,004	L	0,5513	SL	-0,2586

BBNI								
Tahun	Size	Katagori	Tahun	B/M	Katagori	Portofolio size/B/M 2016		Log Portofolio
12/1/2017	3,996	B	12/1/2017	8,743	H	0,4570	BH	-0,3401
11/1/2017	3,908	B	11/1/2017	8,370	M	0,4670	BM	-0,3307
10/1/2017	3,881	B	10/1/2017	8,506	H	0,4563	BH	-0,3408
7/1/2017	3,872	B	7/1/2017	8,291	M	0,4671	BM	-0,3306
9/1/2017	3,869	B	9/1/2017	8,382	H	0,4616	BM	-0,3357
8/1/2017	3,866	B	8/1/2017	8,336	M	0,4638	BM	-0,3337
6/1/2017	3,820	S	6/1/2017	8,389	H	0,4553	SH	-0,3417
5/1/2017	3,816	S	5/1/2017	8,264	M	0,4618	SM	-0,3355
3/1/2017	3,811	S	3/1/2017	8,029	L	0,4747	SL	-0,3236
4/1/2017	3,804	S	4/1/2017	8,213	L	0,4632	SL	-0,3342
2/1/2017	3,796	S	2/1/2017	7,800	L	0,4867	SL	-0,3128
1/1/2017	3,756	S	1/1/2017	7,747	L	0,4848	SL	-0,3144
2/1/2018	3,988	B	2/1/2018	9,945	H	0,4010	BH	-0,3969

1/1/2018	3,973	B	1/1/2018	9,996	H	0,3975	BH	-0,4007
12/1/2018	3,944	B	12/1/2018	9,440	H	0,4178	BH	-0,3790
3/1/2018	3,938	B	3/1/2018	9,448	H	0,4169	BH	-0,3800
11/1/2018	3,929	B	11/1/2018	9,265	M	0,4241	BM	-0,3725
5/1/2018	3,928	B	5/1/2018	9,158	L	0,4289	BL	-0,3676
4/1/2018	3,906	S	4/1/2018	9,228	M	0,4233	SM	-0,3734
8/1/2018	3,892	S	8/1/2018	9,296	M	0,4187	SM	-0,3781
7/1/2018	3,869	S	7/1/2018	9,223	L	0,4195	SL	-0,3773
9/1/2018	3,869	S	9/1/2018	9,287	M	0,4166	SM	-0,3802
10/1/2018	3,865	S	10/1/2018	9,072	L	0,4260	SL	-0,3706
6/1/2018	3,848	S	6/1/2018	9,060	L	0,4248	SL	-0,3718
4/1/2019	3,982	B	4/1/2019	11,037	M	0,3608	BM	-0,4427
3/1/2019	3,973	B	3/1/2019	11,086	H	0,3584	BH	-0,4456
6/1/2019	3,964	B	6/1/2019	10,923	M	0,3629	BM	-0,4402
1/1/2019	3,958	B	1/1/2019	11,239	H	0,3522	BH	-0,4533
2/1/2019	3,944	B	2/1/2019	11,122	H	0,3547	BH	-0,4502
7/1/2019	3,928	B	7/1/2019	11,078	M	0,3546	BM	-0,4503
5/1/2019	3,924	S	5/1/2019	10,773	L	0,3643	SL	-0,4386
12/1/2019	3,895	S	12/1/2019	11,013	M	0,3537	SM	-0,4514
9/1/2019	3,886	S	9/1/2019	10,864	L	0,3577	SL	-0,4464
10/1/2019	3,885	S	10/1/2019	10,915	L	0,3559	SL	-0,4486
11/1/2019	3,875	S	11/1/2019	10,563	L	0,3668	SL	-0,4355
8/1/2019	3,866	S	8/1/2019	11,086	H	0,3488	SH	-0,4575
1/1/2020	3,857	B	1/1/2020	9,467	H	0,4074	BH	-0,3899
2/1/2020	3,847	B	2/1/2020	8,715	H	0,4414	BH	-0,3552
12/1/2020	3,791	B	12/1/2020	9,697	H	0,3909	BH	-0,4079

2/1/2018	3,577	B	2/1/2018	13,849	H	0,2583	BH	-0,5879
1/1/2018	3,568	B	1/1/2018	13,904	H	0,2566	BH	-0,5907
12/1/2018	3,563	B	12/1/2018	13,054	H	0,2730	BH	-0,5639
11/1/2018	3,559	B	11/1/2018	12,781	L	0,2784	BL	-0,5553
3/1/2018	3,556	B	3/1/2018	13,070	H	0,2721	BH	-0,5653
4/1/2018	3,508	B	4/1/2018	12,835	M	0,2733	BM	-0,5634
8/1/2018	3,502	S	8/1/2018	12,905	M	0,2714	SM	-0,5664
9/1/2018	3,498	S	9/1/2018	12,832	M	0,2726	SM	-0,5644
10/1/2018	3,498	S	10/1/2018	12,521	L	0,2794	SL	-0,5538
5/1/2018	3,489	S	5/1/2018	12,883	M	0,2708	SM	-0,5674
7/1/2018	3,487	S	7/1/2018	12,785	L	0,2728	SL	-0,5642
6/1/2018	3,453	S	6/1/2018	12,612	L	0,2738	SL	-0,5625
7/1/2019	3,651	B	7/1/2019	13,146	M	0,2778	BM	-0,5563
12/1/2019	3,643	B	12/1/2019	12,986	M	0,2806	BM	-0,5520
4/1/2019	3,640	B	4/1/2019	13,317	H	0,2734	BH	-0,5632
6/1/2019	3,639	B	6/1/2019	13,122	M	0,2774	BM	-0,5570
8/1/2019	3,630	B	8/1/2019	13,091	M	0,2773	BM	-0,5570
10/1/2019	3,624	B	10/1/2019	12,906	L	0,2808	BL	-0,5516
9/1/2019	3,615	S	9/1/2019	12,817	L	0,2820	SL	-0,5497
3/1/2019	3,614	S	3/1/2019	13,444	H	0,2688	SH	-0,5706
5/1/2019	3,613	S	5/1/2019	12,908	L	0,2799	SL	-0,5530
11/1/2019	3,612	S	11/1/2019	12,502	L	0,2889	SL	-0,5393
1/1/2019	3,585	S	1/1/2019	13,685	H	0,2620	SH	-0,5817
2/1/2019	3,585	S	2/1/2019	13,496	H	0,2657	SH	-0,5757

1/1/2020	3,649	B	1/1/2020	12,225	H	0,2985	BH	-0,5250
2/1/2020	3,622	B	2/1/2020	11,306	H	0,3204	BH	-0,4944
12/1/2020	3,620	B	12/1/2020	12,404	H	0,2918	BH	-0,5348
11/1/2020	3,612	B	11/1/2020	11,670	H	0,3095	BH	-0,5094
8/1/2020	3,545	B	8/1/2020	11,096	M	0,3195	BM	-0,4955
10/1/2020	3,526	B	10/1/2020	10,922	M	0,3229	BM	-0,4910
7/1/2020	3,500	S	7/1/2020	11,052	M	0,3167	SM	-0,4994
9/1/2020	3,483	S	9/1/2020	10,502	L	0,3317	SL	-0,4793
6/1/2020	3,481	S	6/1/2020	10,581	M	0,3290	SM	-0,4828
3/1/2020	3,480	S	3/1/2020	9,796	L	0,3553	SL	-0,4495
5/1/2020	3,470	S	5/1/2020	10,290	L	0,3372	SL	-0,4721
4/1/2020	3,436	S	4/1/2020	10,308	L	0,3334	SL	-0,4771

BMRI								
Tahun	Size	Katagori	Tahun	B/M	Katagori	Portofolio size/B/M 2016		Log Portofolio
12/1/2017	3,903	B	12/1/2017	5,932	H	0,6579	BH	-0,18182
11/1/2017	3,869	B	11/1/2017	5,604	H	0,6904	BH	-0,16087
10/1/2017	3,848	B	10/1/2017	5,686	H	0,6768	BH	-0,16953
7/1/2017	3,834	B	7/1/2017	5,550	M	0,6908	BM	-0,16062
9/1/2017	3,828	B	9/1/2017	5,616	H	0,6815	BH	-0,16651
8/1/2017	3,816	B	8/1/2017	5,598	M	0,6817	BM	-0,16638
6/1/2017	3,804	S	6/1/2017	5,583	M	0,6815	SM	-0,16654
5/1/2017	3,799	S	5/1/2017	5,502	M	0,6906	SM	-0,16080
3/1/2017	3,767	S	3/1/2017	5,384	L	0,6996	SL	-0,15513
4/1/2017	3,767	S	4/1/2017	5,498	L	0,6852	SL	-0,16416

2/1/2017	3,752	S	2/1/2017	5,230	L	0,7174	SL	-0,14427
1/1/2017	3,736	S	1/1/2017	5,162	L	0,7239	SL	-0,14034
2/1/2018	3,919	B	2/1/2018	6,672	H	0,5874	BH	-0,23105
1/1/2018	3,911	B	1/1/2018	6,694	H	0,5843	BH	-0,23340
3/1/2018	3,885	B	3/1/2018	6,314	H	0,6153	BH	-0,21089
11/1/2018	3,869	B	11/1/2018	6,203	M	0,6237	BM	-0,20501
12/1/2018	3,868	B	12/1/2018	6,347	H	0,6094	BH	-0,21512
4/1/2018	3,853	B	4/1/2018	6,167	M	0,6247	BM	-0,20431
5/1/2018	3,848	S	5/1/2018	6,163	L	0,6244	SL	-0,20455
8/1/2018	3,839	S	8/1/2018	6,213	M	0,6178	SM	-0,20912
6/1/2018	3,836	S	6/1/2018	5,992	L	0,6401	SL	-0,19374
10/1/2018	3,836	S	10/1/2018	6,026	L	0,6365	SL	-0,19620
9/1/2018	3,828	S	9/1/2018	6,189	M	0,6185	SM	-0,20868
7/1/2018	3,823	S	7/1/2018	6,154	L	0,6212	SL	-0,20680
6/1/2019	3,904	B	6/1/2019	7,295	M	0,5352	BM	-0,27148
7/1/2019	3,902	B	7/1/2019	7,337	M	0,5318	BM	-0,27427
4/1/2019	3,888	B	4/1/2019	7,437	H	0,5228	BH	-0,28168
5/1/2019	3,885	B	5/1/2019	7,159	L	0,5427	BL	-0,26543
12/1/2019	3,885	B	12/1/2019	7,264	M	0,5349	BM	-0,27175
3/1/2019	3,874	B	3/1/2019	7,481	H	0,5178	BH	-0,28582
1/1/2019	3,872	S	1/1/2019	7,557	H	0,5124	SH	-0,29042
8/1/2019	3,860	S	8/1/2019	7,343	M	0,5257	SM	-0,27923
2/1/2019	3,853	S	2/1/2019	7,491	H	0,5143	SH	-0,28875
10/1/2019	3,847	S	10/1/2019	7,252	L	0,5304	SL	-0,27540
9/1/2019	3,844	S	9/1/2019	7,189	L	0,5346	SL	-0,27196

11/1/2019	3,844	S	11/1/2019	7,006	L	0,5486	SL	-0,26077
1/1/2020	3,878	B	1/1/2020	6,361	H	0,6096	BH	-0,21492
2/1/2020	3,862	B	2/1/2020	5,864	H	0,6586	BH	-0,18139
11/1/2020	3,801	B	11/1/2020	6,131	H	0,6199	BH	-0,20765
12/1/2020	3,801	B	12/1/2020	6,532	H	0,5819	BH	-0,23516
8/1/2020	3,775	B	8/1/2020	5,763	M	0,6550	BM	-0,18378
7/1/2020	3,763	B	7/1/2020	5,683	M	0,6622	BM	-0,17898
10/1/2020	3,762	B	10/1/2020	5,661	M	0,6644	BM	-0,17755
6/1/2020	3,695	S	6/1/2020	5,513	M	0,6703	SM	-0,17374
9/1/2020	3,695	S	9/1/2020	5,473	L	0,6751	SL	-0,17063
3/1/2020	3,670	S	3/1/2020	5,136	L	0,7146	SL	-0,14591
5/1/2020	3,650	S	5/1/2020	5,408	L	0,6749	SL	-0,17074
4/1/2020	3,649	S	4/1/2020	5,367	L	0,6800	SL	-0,16748

BTPN								
Tahun	Size	Katagori	Tahun	B/M	Katagori	Portofolio size/B/M 2016		Log Portofolio
2/1/2017	3,452	B	2/1/2017	4,596	L	0,7510	BL	-0,1244
3/1/2017	3,436	B	3/1/2017	4,772	L	0,7200	BL	-0,1427
4/1/2017	3,417	B	4/1/2017	4,901	L	0,6972	BL	-0,1566
1/1/2017	3,412	B	1/1/2017	4,570	L	0,7465	BL	-0,1270
8/1/2017	3,407	B	8/1/2017	5,102	M	0,6677	BM	-0,1754
9/1/2017	3,407	B	9/1/2017	5,102	H	0,6677	BH	-0,1754
10/1/2017	3,407	B	10/1/2017	5,193	H	0,6560	BH	-0,1831
7/1/2017	3,401	S	7/1/2017	5,058	M	0,6724	SM	-0,1724
5/1/2017	3,396	S	5/1/2017	4,976	M	0,6825	SM	-0,1659

6/1/2017	3,394	S	6/1/2017	5,058	M	0,6712	SM	-0,1732
12/1/2017	3,391	S	12/1/2017	5,521	H	0,6142	SH	-0,2117
11/1/2017	3,387	S	11/1/2017	5,175	H	0,6546	SH	-0,1840
8/1/2018	3,604	B	8/1/2018	5,536	L	0,6510	BL	-0,1864
6/1/2018	3,602	B	6/1/2018	5,338	L	0,6748	BL	-0,1708
7/1/2018	3,587	B	7/1/2018	5,488	L	0,6536	BL	-0,1847
9/1/2018	3,573	B	9/1/2018	5,547	M	0,6441	BM	-0,1910
10/1/2018	3,565	B	10/1/2018	5,425	L	0,6571	BL	-0,1823
5/1/2018	3,562	B	5/1/2018	5,570	M	0,6396	BM	-0,1941
1/1/2018	3,551	S	1/1/2018	6,167	H	0,5758	SH	-0,2397
11/1/2018	3,551	S	11/1/2018	5,654	M	0,6281	SM	-0,2019
2/1/2018	3,548	S	2/1/2018	6,165	H	0,5754	SH	-0,2400
12/1/2018	3,537	S	12/1/2018	5,807	H	0,6090	SH	-0,2154
3/1/2018	3,525	S	3/1/2018	5,821	H	0,6055	SH	-0,2179
4/1/2018	3,467	S	4/1/2018	5,734	M	0,6047	SM	-0,2185
1/1/2019	3,579	B	1/1/2019	7,050	H	0,5076	BH	-0,2945
4/1/2019	3,569	B	4/1/2019	6,984	H	0,5111	BH	-0,2915
2/1/2019	3,568	B	2/1/2019	6,974	M	0,5117	BM	-0,2910
5/1/2019	3,565	B	5/1/2019	6,727	L	0,5299	BL	-0,2758
6/1/2019	3,559	B	6/1/2019	6,901	M	0,5157	BM	-0,2876
3/1/2019	3,556	B	3/1/2019	7,025	H	0,5062	BH	-0,2957
7/1/2019	3,520	S	7/1/2019	7,012	H	0,5019	SH	-0,2993
8/1/2019	3,512	S	8/1/2019	6,959	M	0,5047	SM	-0,2970
9/1/2019	3,512	S	9/1/2019	6,784	L	0,5177	SL	-0,2860
12/1/2019	3,512	S	12/1/2019	6,928	M	0,5069	SM	-0,2951
10/1/2019	3,505	S	10/1/2019	6,862	L	0,5108	SL	-0,2918

11/1/2019	3,498	S	11/1/2019	6,637	L	0,5271	SL	-0,2781
12/1/2020	3,493	B	12/1/2020	6,925	H	0,5044	BH	-0,2972
1/1/2020	3,464	B	1/1/2020	6,937	H	0,4993	BH	-0,3016
2/1/2020	3,433	B	2/1/2020	6,426	H	0,5343	BH	-0,2722
11/1/2020	3,415	B	11/1/2020	6,648	H	0,5137	BH	-0,2893
8/1/2020	3,375	B	8/1/2020	6,279	M	0,5375	BM	-0,2696
7/1/2020	3,360	B	7/1/2020	6,201	M	0,5419	BM	-0,2661
10/1/2020	3,358	S	10/1/2020	6,178	M	0,5436	SM	-0,2648
6/1/2020	3,334	S	6/1/2020	5,951	M	0,5604	SM	-0,2515
9/1/2020	3,332	S	9/1/2020	5,912	L	0,5637	SL	-0,2490
3/1/2020	3,281	S	3/1/2020	5,596	L	0,5863	SL	-0,2319
5/1/2020	3,265	S	5/1/2020	5,890	L	0,5543	SL	-0,2563
4/1/2020	3,260	S	12/1/2020	5,852	L	0,5571	SL	-0,2541

Lampiran 9

Perhitungan Rata-Rata SMB

Tahun	Perusahaan	SMB (B/M)
2017	BBCA	-0,8610
	BBNI	-1,2917
	BBRI	-1,0236
	BMRI	-0,5960
	BTPN	-0,5456
2018	BBCA	-0,8528
	BBNI	-1,4858
	BBRI	-2,2366
	BMRI	-0,7858
	BTPN	-0,9636
2019	BBCA	-2,1202
	BBNI	-1,7840
	BBRI	-2,2575
	BMRI	-1,1164
	BTPN	-1,1686
2020	BBCA	-0,9544
	BBNI	-1,3607
	BBRI	-1,8435
	BMRI	-0,3687
	BTPN	-0,9421

Lampiran 10

Perhitungan Rata-Rata HML

Tahun	Perusahaan	HML
2017	BBCA	-0,0425
	BBNI	0,1312
	BBRI	-0,0308
	BMRI	-0,0374
	BTPN	-0,1018
2018	BBCA	0,0971
	BBNI	-0,0346
	BBRI	-0,0360
	BMRI	-0,0446
	BTPN	-0,0943
2019	BBCA	-0,5441
	BBNI	-0,0187

	BBRI	-0,0488
	BMRI	-0,0366
	BTPN	-0,0247
2020	BBCA	-0,1135
	BBNI	-0,0714
	BBRI	-0,0928
	BMRI	-0,0922
	BTPN	-0,0846

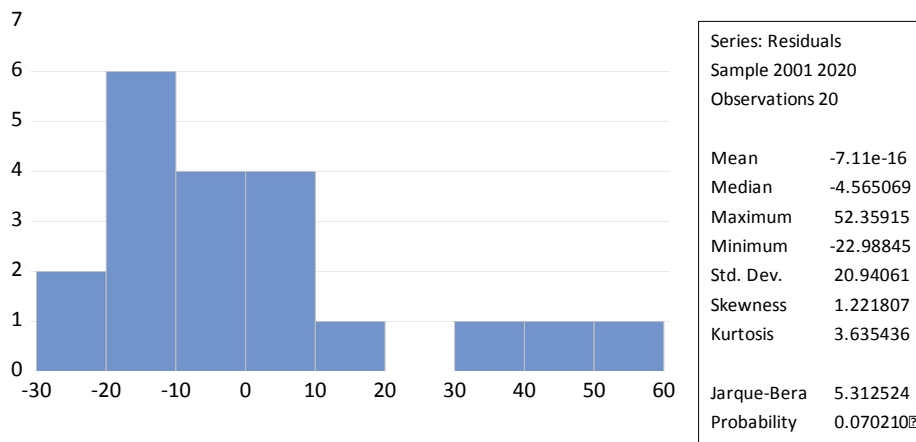
Lampiran 11

Statistik Deskriptif

	Y	X1	X2	X3
Mean	7.350000	0.044000	9.34E+10	0.911000
Median	1.000000	-0.045000	8.70E+10	0.925000
Maximum	57.00000	1.341000	1.81E+11	1.118000
Minimum	-17.00000	-0.055000	1.99E+10	0.698000
Std. Dev.	21.97433	0.314964	5.19E+10	0.130354
Skewness	0.985512	3.779088	0.419613	0.052193
Kurtosis	2.895150	15.96150	2.330250	1.798857
Jarque-Bera	3.246605	187.6055	0.960721	1.211368
Probability	0.197246	0.000000	0.618560	0.545701
Sum	147.0000	0.880000	1.87E+12	18.22000
Sum Sq. Dev.	9174.550	1.884844	5.11E+22	0.322852
Observations	20	20	20	20

Lampiran 12

Uji Normalitas



Lampiran 13

Uji Multikolinieritas

	X1	X2	X3
X1	1.000000	-0.041347	-0.196894
X2	-0.041347	1.000000	-0.027268
X3	-0.196894	-0.027268	1.000000

Lampiran 14

Uji Heteroskedastisitas

Heteroskedasticity Test: Glejser			
Null hypothesis: Homoskedasticity			
F-statistic	0.320295	Prob. F(2,17)	0.7302
Obs*R-squared	0.726269	Prob. Chi-Square(2)	0.6955
Scaled explained SS	1.485372	Prob. Chi-Square(2)	0.4758

Lampiran 15

Uji Outokorelasi

Breusch-Godfrey Serial Correlation LM Test:			
Null hypothesis: No serial correlation at up to 2 lags			
F-statistic	0.012219	Prob. F(2,16)	0.9879
Obs*R-squared	0.030501	Prob. Chi-Square(2)	0.9849

Lampiran 16

Regresi Linier Berganda

Dependent Variable: Y				
Method: Least Squares				
Date: 05/26/21 Time: 22:31				
Sample: 0001 0020				
Included observations: 20				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-53.57604	55.97890	-0.957076	0.3548
X1	16.74096	17.65387	0.948288	0.3591
X2	1.89E-11	1.14E-10	0.166246	0.8703
X3	87.38358	86.16238	1.014173	0.3277
SMB	0.001625	0.002144	0.757767	0.4612
HML	0.001868	0.004578	0.407964	0.6895
R-squared	0.159558	Mean dependent var		7.350000
Adjusted R-squared	-0.140600	S.D. dependent var		21.97433
S.E. of regression	23.46834	Akaike info criterion		9.392506
Sum squared resid	7710.680	Schwarz criterion		9.691226
Log likelihood	-87.92506	Hannan-Quinn criter.		9.450820
F-statistic	0.531579	Durbin-Watson stat		1.345154
Prob(F-statistic)	0.749068			