

Lampiran 1

Daftar Perusahaan Indeks LQ 45 yang Terdaftar di Bursa Efek Indonesia

Periode 2017-2019

No.	KODE	Nama Perusahaan
1	AALI	Astra Agro Lestari Tbk.
2	ADHI	Adhi Karya (Persero) Tbk.
3	ADRO	Adaro Energy Tbk.
4	AKRA	AKR Corporindo Tbk.
5	ANTM	Aneka Tambang Tbk.
6	ASII	Astra International Tbk.
7	ASRI	Alam Sutera Realty Tbk.
8	BBCA	Bank Central Asia Tbk.
9	BBNI	Bank Negara Indonesia (Persero) Tbk.
10	BBRI	Bank Rakyat Indonesia (Persero) Tbk.
11	BBTN	Bank Tabungan Negara (Persero) Tbk.
12	BJBR	BPD Jawa Barat dan Banten Tbk.
13	BKSL	Sentul City Tbk.
14	BMRI	Bank Mandiri (Persero) Tbk.
15	BMTR	Global Mediacom Tbk.
16	BRPT	Barito Pacific Tbk.
17	BSDE	Bumi Serpong Damai Tbk.
18	BTPS	Bank Tabungan Pensiunan Nasional Syariah Tbk.
19	BUMI	Bumi Resources Tbk.
20	CPIN	Charoen Pokphand Indonesia Tbk.
21	CTRA	Ciputra Development Tbk.
22	ELSA	Elnusa Tbk.
23	ERAA	Erajaya Swasembada Tbk.
24	EXCL	XL Axiata Tbk.
25	GGRM	Gudang Garam Tbk.
26	HMSP	HM Sampoerna Tbk.
27	ICBP	Indofood CBP Sukses Makmur Tbk.
28	INCO	Vale Indonesia Tbk.
29	INDF	Indofood Sukses Makmur Tbk.
30	INDY	Indika Energy Tbk.
31	INKP	Indah Kiat Pulp & Paper Tbk.
32	INTP	Indocement Tunggul Prakasa Tbk.
33	ITMG	Indo Tambangraya Megah Tbk.
34	JPFA	Japfa Comfeed Indonesia Tbk.
35	JSMR	Jasa Marga (Persero) Tbk.
36	KLBF	Kalbe Farma Tbk.

No.	KODE	Nama Perusahaan
37	LPKR	Lippo Karawaci Tbk.
38	LPPF	Matahari Department Store Tbk.
39	LSIP	PP London Sumatera Tbk.
40	MEDC	Medco Energi Internasional Tbk.
41	MNCN	Media Nusantara Citra Tbk.
42	MYRX	Hanson International Tbk.
43	PGAS	Perusahaan Gas Negara (Persero) Tbk.
44	PPRO	PP Properti Tbk.
45	PTBA	Tambang Batubara Bukit Asam (Persero) Tbk.
46	PTPP	PP (Persero) Tbk.
47	PWON	Pakuwon Jati Tbk.
48	SCMA	Surya Citra Media Tbk.
49	SMGR	Semen Indonesia (Persero) Tbk.
50	SMRA	Summarecon Agung Tbk.
51	SRIL	Sri Rejeki Isman Tbk.
52	TKIM	Pabrik Kertas Tjiwi Kimia Tbk.
53	SSMS	Sawit Sumbermas Sarana Tbk.
54	TLKM	Telekomunikasi Indonesia (Persero) Tbk.
55	TPIA	Chandra Asri Petrochemical Tbk.
56	TRAM	Trada Alam Minera Tbk.
57	UNTR	United Tractors Tbk.
58	UNVR	Unilever Indonesia Tbk.
59	WIKA	Wijaya Karya (Persero) Tbk.
60	WSBP	Waskita Beton Precast Tbk.
61	WSKT	Waskita Karya (Persero) Tbk.

Lampiran 2

Penentuan Sampel Penelitian

No.	KODE	Nama Perusahaan	Kriteria 1						Kriteria 2			Sampel
			feb-jul 17	ags- jan 18	feb-jul 18	ags- jan 19	feb- jul 19	ags- jan 20	2017	2018	2019	
1	AALI	Astra Agro Lestari Tbk.	√	√	-	-	-	-	√	√	√	-
2	ADHI	Adhi Karya (Persero) Tbk.	√	√	√	√	√	-	√	√	√	-
3	ADRO	Adaro Energy Tbk.	√	√	√	√	√	√	√	√	√	√
4	AKRA	AKR Corporindo Tbk.	√	√	√	√	√	√	√	√	√	√
5	ANTM	Aneka Tambang Tbk.	√	√	√	√	√	√	√	√	√	√
6	ASII	Astra International Tbk.	√	√	√	√	√	√	√	√	√	√
7	ASRI	Alam Sutera Realty Tbk.	√	-	-	-	-	-	√	√	√	-
8	BBCA	Bank Central Asia Tbk.	√	√	√	√	√	√	√	√	√	√
9	BBNI	Bank Negara Indonesia (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
10	BBRI	Bank Rakyat Indonesia (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
11	BBTN	Bank Tabungan Negara (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
12	BJBR	BPD Jawa Barat dan Banten Tbk.	-	-	√	√	-	-	√	√	√	-
13	BKSL	Sentul City Tbk.	-	-	-	√	-	-	√	√	√	-
14	BMRI	Bank Mandiri (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
15	BMTR	Global Mediacom Tbk.	-	√	√	-	-	-	√	√	√	-
16	BRPT	Barito Pacific Tbk.	-	√	√	√	√	√	√	√	√	-
17	BSDE	Bumi Serpong Damai Tbk.	√	√	√	√	√	√	√	√	√	√
18	BTPS	Bank Tabungan Pensiunan Nasional Syariah Tbk.	-	-	-	-	-	√	√	√	√	-
19	BUMI	Bumi Resources Tbk.	√	√	√	-	-	-	√	√	√	-
20	CPIN	Charoen Pokphand Indonesia Tbk.	√	-	-	-	√	√	√	√	√	-
21	CTRA	Ciputra Development Tbk.	-	-	-	-	-	√	√	√	√	-
22	ELSA	Elnusa Tbk.	√	-	-	√	√	-	√	√	√	-

No.	KODE	Nama Perusahaan	Kriteria 1						Kriteria 2			Sampel
			feb-jul 17	ags- jan 18	feb-jul 18	ags- jan 19	feb- jul 19	ags- jan 20	2017	2018	2019	
23	ERAA	Erajaya Swasembada Tbk.	-	-	-	-	√	√	√	√	√	-
24	EXCL	XL Axiata Tbk.	√	√	√	√	√	√	√	√	√	√
25	GGRM	Gudang Garam Tbk.	√	√	√	√	√	√	√	√	√	√
26	HMSP	HM Sampoerna Tbk.	√	√	√	√	√	√	√	√	√	√
27	ICBP	Indofood CBP Sukses Makmur Tbk.	√	√	√	√	√	√	√	√	√	√
28	INCO	Vale Indonesia Tbk.	√	√	√	√	√	√	√	√	√	√
29	INDF	Indofood Sukses Makmur Tbk.	√	√	√	√	√	√	√	√	√	√
30	INDY	Indika Energy Tbk.	-	-	√	√	√	√	√	√	√	-
31	INKP	Indah Kiat Pulp & Paper Tbk.	-	-	-	-	√	√	√	√	√	-
32	INTP	Indocement Tunggul Prakasa Tbk.	√	√	√	√	√	√	√	√	√	√
33	ITMG	Indo Tambangraya Megah Tbk.	-	-	-	√	√	√	√	√	√	-
34	JPFA	Japfa Comfeed Indonesia Tbk.	-	-	-	-	-	√	√	√	√	-
35	JSMR	Jasa Marga (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
36	KLBF	Kalbe Farma Tbk.	√	√	√	√	√	√	√	√	√	√
37	LPKR	Lippo Karawaci Tbk.	√	√	√	√	-	-	√	√	√	-
38	LPPF	Matahari Department Store Tbk.	√	√	√	√	√	√	√	√	√	√
39	LSIP	PP London Sumatera Tbk.	√	√	-	-	-	-	√	√	√	-
40	MEDC	Medco Energi Internasional Tbk.	-	-	-	√	√	√	√	√	√	-
41	MNCN	Media Nusantara Citra Tbk.	√	√	√	√	√	√	√	√	√	√
42	MYRX	Hanson International Tbk.	√	√	√	-	-	-	√	√	√	-
43	PGAS	Perusahaan Gas Negara (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
44	PPRO	PP Properti Tbk.	√	√	-	-	-	-	√	√	√	-
45	PTBA	Tambang Batubara Bukit Asam (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
46	PTPP	PP (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
47	PWON	Pakuwon Jati Tbk.	√	√	√	-	√	√	√	√	√	-
48	SCMA	Surya Citra Media Tbk.	√	√	√	√	√	√	√	√	√	√

No.	KODE	Nama Perusahaan	Kriteria 1						Kriteria 2			Sampel
			feb-jul 17	ags- jan 18	feb-jul 18	ags- jan 19	feb- jul 19	ags- jan 20	2017	2018	2019	
49	SMGR	Semen Indonesia (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
50	SMRA	Summarecon Agung Tbk.	√	√	-	-	-	-	√	√	√	-
51	SRIL	Sri Rejeki Isman Tbk.	√	√	√	√	√	√	√	√	√	√
52	TKIM	Pabrik Kertas Tjiwi Kimia Tbk.	-	-	-	-	√	√	√	√	√	-
53	SSMS	Sawit Sumbermas Sarana Tbk.	√	√	√	√	-	-	√	√	√	-
54	TLKM	Telekomunikasi Indonesia (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
55	TPIA	Chandra Asri Petrochemical Tbk.	-	-	√	√	√	√	√	√	√	-
56	TRAM	Trada Alam Minera Tbk.	-	-	√	-	-	-	√	√	√	-
57	UNTR	United Tractors Tbk.	√	√	√	√	√	√	√	√	√	√
58	UNVR	Unilever Indonesia Tbk.	√	√	√	√	√	√	√	√	√	√
59	WIKA	Wijaya Karya (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√
60	WSBP	Waskita Beton Precast Tbk.	-	-	√	√	√	-	√	√	√	-
61	WSKT	Waskita Karya (Persero) Tbk.	√	√	√	√	√	√	√	√	√	√

Keterangan :

Kriteria 1 : Perusahaan yang terdaftar dalam Indeks LQ45 selama tiga tahun berturut-turut yakni tahun 2017-2019.

Kriteria 2 : Perusahaan Indeks LQ45 yang mempublikasikan laporan keuangan dalam tiga tahun berturut-turut yakni tahun 2017-2019.

Sampel Penelitian

No.	KODE	Nama Perusahaan
1	ADRO	Adaro Energy Tbk.
2	AKRA	AKR Corporindo Tbk.
3	ANTM	Aneka Tambang Tbk.
4	ASII	Astra International Tbk.
5	BBCA	Bank Central Asia Tbk.
6	BBNI	Bank Negara Indonesia (Persero) Tbk.
7	BBRI	Bank Rakyat Indonesia (Persero) Tbk.
8	BBTN	Bank Tabungan Negara (Persero) Tbk.
9	BMRI	Bank Mandiri (Persero) Tbk.
10	BSDE	Bumi Serpong Damai Tbk.
11	EXCL	XL Axiata Tbk.
12	GGRM	Gudang Garam Tbk.
13	HMSP	HM Sampoerna Tbk.
14	ICBP	Indofood CBP Sukses Makmur Tbk.
15	INCO	Vale Indonesia Tbk.
16	INDF	Indofood Sukses Makmur Tbk.
17	INTP	Indocement Tunggul Prakasa Tbk.
18	JSMR	Jasa Marga (Persero) Tbk.
19	KLBF	Kalbe Farma Tbk.
20	LPPF	Matahari Department Store Tbk.
21	MNCN	Media Nusantara Citra Tbk.
22	PGAS	Perusahaan Gas Negara Tbk.
23	PTBA	Tambang Batubara Bukit Asam (Persero) Tbk.
24	PTPP	PP (Persero) Tbk.
25	SCMA	Surya Citra Media Tbk.
26	SMGR	Semen Indonesia (Persero) Tbk.
27	SRIL	Sri Rejeki Isman Tbk.
28	TLKM	Telekomunikasi Indonesia (Persero) Tbk.
29	UNTR	United Tractors Tbk.
30	UNVR	Unilever Indonesia Tbk.
31	WIKA	Wijaya Karya (Persero) Tbk.
32	WSKT	Waskita Karya (Persero) Tbk.

Tabel Perhitungan Rata-Rata Harga Saham

No.	KODE	2017							
		1	2	3	4	5	6	7	HS
1	ADRO	1,835	1,835	1,775	1,680	1,640	1,710	1,625	1,729
2	AKRA	4,900	4,900	4,880	4,670	4,510	4,570	4,510	4,706
3	ANTM	845	845	865	840	830	810	790	832
4	ASII	7,150	7,150	7,375	7,275	7,250	7,075	6,950	7,175
5	BBCA	22,100	22,100	22,900	22,300	22,025	22,300	22,025	22,250
6	BBNI	8,050	8,050	8,000	7,725	7,475	7,325	7,325	7,707
7	BBRI	3,220	3,220	3,230	3,150	3,030	3,050	3,070	3,139
8	BBTN	3,110	3,110	3,110	2,920	2,650	2,890	2,780	2,939
9	BMRI	7,125	7,125	7,200	6,850	6,625	6,800	6,800	6,932
10	BSDE	1,645	1,625	1,610	1,560	1,565	1,580	1,660	1,606
11	EXCL	2,120	2,120	2,100	1,945	1,830	1,900	1,790	1,972
12	GGRM	69,325	69,325	69,950	68,975	67,200	70,000	67,800	68,939
13	HMSP	3,540	3,540	3,460	3,300	3,280	3,550	3,400	3,439
14	ICBP	8,700	8,775	8,550	8,600	8,600	8,625	8,600	8,636
15	INCO	3,160	3,160	3,280	3,200	3,090	3,100	3,120	3,159
16	INDF	6,975	6,975	6,925	6,725	6,350	6,375	6,200	6,646
17	INTP	17,725	17,725	17,325	17,075	17,000	17,000	16,700	17,221
18	JSMR	4,370	4,370	4,330	4,180	4,120	4,180	4,020	4,224
19	KLBF	1,505	1,505	1,515	1,445	1,390	1,480	1,455	1,471
20	LPPF	10,350	10,350	10,000	9,375	9,600	9,400	8,725	9,686
21	MNCN	1,240	1,200	1,200	1,170	1,130	1,205	1,190	1,191
22	PGAS	1,985	1,985	2,040	1,930	1,930	1,890	1,800	1,937
23	PTBA	2,840	2,870	2,880	2,890	2,890	2,930	2,950	2,893
24	PTPP	2,430	2,430	2,350	2,220	2,220	2,190	2,090	2,276
25	SCMA	2,660	2,710	2,710	2,700	2,660	2,680	2,660	2,683
26	SMGR	9,650	9,650	9,275	9,000	9,000	9,125	8,975	9,239
27	SRIL	342	342	340	332	330	330	328	335
28	TLKM	3,830	3,830	3,870	3,740	3,730	3,800	3,620	3,774
29	UNTR	34,100	34,100	33,250	33,500	33,625	32,800	32,250	33,375
30	UNVR	9,270	9,270	9,190	9,040	9,070	9,580	9,410	9,261
31	WIKA	1,585	1,585	1,560	1,460	1,370	1,355	1,250	1,452
32	WSKT	2,210	2,210	2,110	1,980	1,950	1,995	1,920	2,054

No.	KODE	2018							
		1	2	3	4	5	6	7	HS
1	ADRO	1,275	1,260	1,260	1,295	1,300	1,295	1,300	1,284
2	AKRA	4,770	4,730	4,720	4,750	4,830	4,890	4,750	4,777
3	ANTM	940	925	925	915	900	885	905	914
4	ASII	7,350	7,425	7,425	7,550	7,650	7,525	7,675	7,514
5	BBCA	27,775	27,825	27,575	27,700	27,675	27,475	27,450	27,639
6	BBNI	8,450	8,225	8,175	8,100	8,425	8,600	8,300	8,325
7	BBRI	4,460	4,440	4,430	4,400	4,330	4,330	4,340	4,390
8	BBTN	2,630	2,550	2,450	2,510	2,530	2,530	2,530	2,533
9	BMRI	7,750	7,675	7,675	7,650	7,725	7,775	7,725	7,711
10	BSDE	1,395	1,415	1,425	1,435	1,435	1,390	1,325	1,403
11	EXCL	2,680	2,680	2,680	2,710	2,680	2,680	2,630	2,677
12	GGRM	80,000	82,950	83,175	84,475	84,475	81,650	80,800	82,504
13	HMSP	3,730	3,630	3,630	3,440	3,460	3,440	3,390	3,531
14	ICBP	9,075	9,175	9,300	9,725	9,725	9,700	9,625	9,475
15	INCO	3,890	3,650	3,600	3,580	3,610	3,590	3,650	3,653
16	INDF	6,250	6,400	6,425	6,950	6,950	7,000	6,800	6,682
17	INTP	21,050	21,375	21,450	22,000	22,000	21,150	20,300	21,332
18	JSMR	6,175	5,975	6,025	6,000	6,125	6,100	6,100	6,071
19	KLBF	1,510	1,470	1,515	1,500	1,545	1,545	1,510	1,514
20	LPPF	4,000	3,860	3,940	3,830	3,870	3,820	3,820	3,877
21	MNCN	1,130	1,125	1,015	995	1,000	985	1,050	1,043
22	PGAS	2,260	2,300	2,290	2,240	2,290	2,310	2,250	2,277
23	PTBA	4,040	4,000	4,020	3,990	4,020	4,020	4,050	4,020
24	PTPP	2,140	2,230	2,190	2,140	2,230	2,280	2,270	2,211
25	SCMA	1,680	1,670	1,650	1,650	1,630	1,615	1,615	1,644
26	SMGR	10,550	10,700	10,550	11,250	10,825	10,825	10,900	10,800
27	SRIL	334	336	334	336	336	342	338	337
28	TLKM	3,830	3,910	3,860	3,790	3,790	3,830	3,820	3,833
29	UNTR	27,800	27,700	27,950	27,100	27,225	27,250	27,000	27,432
30	UNVR	9,880	9,880	9,655	9,850	9,730	9,280	9,100	9,625
31	WIKA	2,180	2,280	2,200	2,140	2,220	2,180	2,180	2,197
32	WSKT	1,850	1,915	1,875	1,900	1,935	1,895	1,895	1,895

No.	KODE	2019							
		1	2	3	4	5	6	7	HS
1	ADRO	1,130	1,090	1,110	1,090	1,085	1,085	1,030	1,089
2	AKRA	2,720	2,640	2,850	2,820	2,850	2,880	2,780	2,791
3	ANTM	690	685	725	720	730	730	700	711
4	ASII	5,175	5,050	5,125	5,175	5,075	5,150	4,880	5,090
5	BBCA	31,000	30,500	30,500	30,925	30,675	31,200	30,650	30,779
6	BBNI	4,710	4,610	4,650	4,680	4,590	4,600	4,440	4,611
7	BBRI	3,140	3,090	3,150	3,140	3,120	3,160	2,990	3,113
8	BBTN	1,295	1,275	1,280	1,265	1,285	1,265	1,210	1,268
9	BMRI	5,700	5,600	5,875	5,850	5,700	5,800	5,500	5,718
10	BSDE	735	715	730	725	715	690	655	709
11	EXCL	2,820	2,760	2,800	2,730	2,540	2,500	2,380	2,647
12	GGRM	49,375	47,700	48,500	47,425	49,650	49,975	48,325	48,707
13	HMSP	1,760	1,685	1,700	1,685	1,725	1,705	1,615	1,696
14	ICBP	9,400	9,175	9,000	9,050	9,125	9,200	9,300	9,179
15	INCO	3,250	3,280	3,470	3,430	3,400	3,420	3,350	3,371
16	INDF	6,725	6,475	6,475	6,425	6,400	6,450	6,475	6,489
17	INTP	12,400	12,225	12,300	12,350	12,400	12,375	11,900	12,279
18	JSMR	4,190	4,040	4,070	4,030	3,990	3,930	3,860	4,016
19	KLBF	1,615	1,570	1,550	1,515	1,525	1,565	1,560	1,557
20	LPPF	1,425	1,400	1,325	1,330	1,315	1,305	1,215	1,331
21	MNCN	900	885	875	855	840	820	790	852
22	PGAS	1,245	1,220	1,230	1,220	1,230	1,265	1,200	1,230
23	PTBA	2,200	2,370	2,470	2,460	2,450	2,210	2,310	2,353
24	PTPP	1,070	1,045	1,000	995	1,005	975	910	1,000
25	SCMA	800	820	880	820	785	810	790	815
26	SMGR	9,450	9,275	9,375	9,400	9,475	9,225	9,125	9,332
27	SRIL	202	199	199	199	198	196	186	197
28	TLKM	3,070	3,020	3,040	3,020	3,000	3,050	2,920	3,017
29	UNTR	20,075	19,450	21,000	21,600	21,500	21,350	20,450	20,775
30	UNVR	8,050	8,050	8,075	8,150	8,250	8,400	8,250	8,175
31	WIKA	1,255	1,230	1,210	1,210	1,205	1,190	1,110	1,201
32	WSKT	730	710	670	665	660	625	585	664

Tabel Perhitungan *Price Earnings Ratio*

No.	Tahun	KODE	Harga Saham (Rp)	Labas Bersih (Rp)	Saham Beredar	EPS	PER
1	2017	ADRO	1,860	7,267,662,024,000	31,985,962,000	227.21	8.19
2	2017	AKRA	6,350	1,304,600,520,000	4,006,329,420	325.63	19.50
3	2017	ANTM	625	136,503,269,000	24,030,764,725	5.68	110.03
4	2017	ASII	8,300	23,165,000,000,000	40,483,553,140	572.21	14.51
5	2017	BBCA	21,900	23,321,150,000,000	24,655,010,000	945.90	23.15
6	2017	BBNI	9,900	13,770,592,000,000	18,648,656,458	738.42	13.41
7	2017	BBRI	3,640	29,044,334,000,000	123,345,810,000	235.47	15.46
8	2017	BBTN	3,570	3,027,466,000,000	10,590,000,000	285.88	12.49
9	2017	BMRI	8,000	21,443,042,000,000	46,666,666,666	459.49	17.41
10	2017	BSDE	1,700	5,062,395,669,731	19,246,696,192	263.03	6.46
11	2017	EXCL	2,960	375,244,000,000	10,687,960,423	35.11	84.31
12	2017	GGRM	83,800	7,755,347,000,000	1,924,088,000	4,030.66	20.79
13	2017	HMSF	4,730	12,670,534,000,000	116,318,076,900	108.93	43.42
14	2017	ICBP	8,900	3,543,173,000,000	11,661,908,000	303.82	29.29
15	2017	INCO	2,890	-206,891,508,000	9,936,338,720	-20.82	-138.80
16	2017	INDF	7,625	5,145,063,000,000	8,780,426,500	585.97	13.01
17	2017	INTP	21,950	1,859,818,000,000	3,681,231,699	505.22	43.45
18	2017	JSMR	6,400	2,093,656,062,000	7,257,871,200	288.47	22.19
19	2017	KLBF	1,690	2,453,251,410,604	46,875,122,110	52.34	32.29
20	2017	LPPF	10,000	1,907,077,000,000	2,917,918,080	653.57	15.30
21	2017	MNCN	1,285	1,567,546,000,000	14,276,103,500	109.80	11.70
22	2017	PGAS	1,750	3,431,555,903,712	24,241,508,196	141.56	12.36
23	2017	PTBA	2,460	4,547,232,000,000	11,520,659,245	394.70	6.23
24	2017	PTPP	2,640	1,723,852,894,286	6,199,897,354	278.05	9.49
25	2017	SCMA	2,480	1,317,748,064,000	14,621,601,234	90.12	27.52
26	2017	SMGR	9,900	2,043,025,914,000	5,931,520,000	344.44	28.74
27	2017	SRIL	380	921,742,515,360	20,452,176,844	45.07	8.43
28	2017	TLKM	4,440	32,701,000,000,000	100,799,996,400	324.41	13.69
29	2017	UNTR	35,400	7,673,322,000,000	3,730,135,136	2,057.12	17.21
30	2017	UNVR	11,180	7,004,562,000,000	7,630,000,000	918.03	12.18
31	2017	WIKA	1,550	1,356,115,000,000	8,969,951,372	151.18	10.25
32	2017	WSKT	2,210	4,201,572,490,754	13,573,902,600	309.53	7.14
33	2018	ADRO	1,215	6,915,271,221,000	31,985,962,000	216.20	5.62
34	2018	AKRA	4,290	1,596,652,821,000	4,014,694,920	397.70	10.79
35	2018	ANTM	765	874,426,593,000	24,030,764,725	36.39	21.02
36	2018	ASII	8,225	27,372,000,000,000	40,483,553,140	676.13	12.16
37	2018	BBCA	26,000	25,851,660,000,000	24,655,010,000	1,048.54	24.80
38	2018	BBNI	8,800	15,091,763,000,000	18,648,656,458	809.27	10.87

No.	Tahun	KODE	Harga Saham (Rp)	Lab a Bersih (Rp)	Saham Beredar	EPS	PER
39	2018	BBRI	3,660	32,418,486,000,000	123,345,810,000	262.83	13.93
40	2018	BBTN	2,540	2,807,923,000,000	10,590,000,000	265.15	9.58
41	2018	BMRI	7,375	25,851,937,000,000	46,666,666,666	553.97	13.31
42	2018	BSDE	1,255	2,165,175,000,000	19,246,696,192	112.50	11.16
43	2018	EXCL	1,980	-3,296,890,000,000	10,687,960,423	-308.47	-6.42
44	2018	GGRM	83,625	7,793,068,000,000	1,924,088,000	4,050.27	20.65
45	2018	HMSP	3,710	13,538,418,000,000	116,318,076,900	116.39	31.88
46	2018	ICBP	10,450	4,658,781,000,000	11,661,908,000	399.49	26.16
47	2018	INCO	3,260	876,274,272,000	9,936,338,720	88.19	36.97
48	2018	INDF	7,450	4,961,851,000,000	8,780,426,500	565.10	13.18
49	2018	INTP	18,450	1,145,937,000,000	3,681,231,699	311.29	59.27
50	2018	JSMR	4,280	2,036,493,000,000	7,257,871,200	280.59	15.25
51	2018	KLBF	1,520	2,497,261,964,757	46,875,122,110	53.27	28.53
52	2018	LPPF	5,600	1,097,332,000,000	2,917,918,080	376.07	14.89
53	2018	MNCN	690	1,605,621,000,000	14,276,103,500	112.47	6.14
54	2018	PGAS	2,120	5,280,332,435,460	24,241,508,196	217.82	9.73
55	2018	PTBA	4,300	5,121,112,000,000	11,520,659,250	444.52	9.67
56	2018	PTPP	1,805	1,958,993,059,360	6,199,897,354	315.97	5.71
57	2018	SCMA	1,870	1,475,042,200,000	14,621,601,234	100.88	18.54
58	2018	SMGR	11,500	3,085,704,000,000	5,931,520,000	520.22	22.11
59	2018	SRIL	358	1,224,455,913,873	20,452,176,844	59.87	5.98
60	2018	TLKM	3,750	26,979,000,000,000	99,062,216,600	272.34	13.77
61	2018	UNTR	27,350	11,498,409,000,000	3,730,135,136	3,082.57	8.87
62	2018	UNVR	9,080	9,081,187,000,000	7,630,000,000	1,190.19	7.63
63	2018	WIKA	1,655	2,073,300,000,000	8,969,951,372	231.14	7.16
64	2018	WSKT	1,680	4,619,567,705,553	13,573,902,600	340.33	4.94
65	2019	ADRO	1,555	6,046,962,802,000	31,985,962,000	189.05	8.23
66	2019	AKRA	3,950	703,077,279,000	4,014,694,920	175.13	22.56
67	2019	ANTM	840	193,852,031,000	24,030,764,725	8.07	104.13
68	2019	ASII	6,925	26,621,000,000,000	40,483,553,140	657.58	10.53
69	2019	BBCA	33,425	28,569,974,000,000	24,655,010,000	1,158.79	28.84
70	2019	BBNI	7,850	15,508,583,000,000	18,648,656,458	831.62	9.44
71	2019	BBRI	4,400	34,413,825,000,000	123,345,810,000	279.00	15.77
72	2019	BBTN	2,120	209,263,000,000	10,590,000,000	19.76	107.29
73	2019	BMRI	7,675	28,455,592,000,000	46,666,666,666	609.76	12.59
74	2019	BSDE	1,255	2,529,448,000,000	19,246,696,192	131.42	9.55
75	2019	EXCL	3,150	712,579,000,000	10,687,960,423	66.67	47.25
76	2019	GGRM	53,000	10,880,704,000,000	1,924,088,000	5,654.99	9.37
77	2019	HMSP	2,100	13,721,513,000,000	116,318,076,900	117.97	17.80
78	2019	ICBP	11,150	5,360,029,000,000	11,661,908,000	459.62	24.26
79	2019	INCO	3,640	797,917,400,000	9,936,338,720	80.30	45.33
80	2019	INDF	7,925	5,902,729,000,000	8,780,426,500	672.26	11.79

No.	Tahun	KODE	Harga Saham (Rp)	Labas Bersih (Rp)	Saham Beredar	EPS	PER
81	2019	INTP	19,025	1,835,305,000,000	3,681,231,699	498.56	38.16
82	2019	JSMR	5,175	2,073,888,000,000	7,257,871,200	285.74	18.11
83	2019	KLBF	1,620	2,537,601,823,645	46,875,122,110	54.14	29.92
84	2019	LPPF	4,210	1,366,884,000,000	2,804,883,280	487.32	8.64
85	2019	MNCN	1,630	2,352,529,000,000	14,276,103,500	164.79	9.89
86	2019	PGAS	2,170	1,570,551,591,695	24,241,508,196	64.79	33.49
87	2019	PTBA	2,660	4,040,394,000,000	11,520,659,250	350.71	7.58
88	2019	PTPP	1,585	1,208,270,555,330	6,199,897,354	194.89	8.13
89	2019	SCMA	1,410	1,051,164,602,000	14,774,672,301	71.15	19.82
90	2019	SMGR	12,000	2,371,233,000,000	5,931,520,000	399.77	30.02
91	2019	SRIL	260	1,218,458,069,748	20,452,176,844	59.58	4.36
92	2019	TLKM	3,970	27,592,000,000,000	99,062,216,600	278.53	14.25
93	2019	UNTR	21,525	11,134,641,000,000	3,730,135,136	2,985.05	7.21
94	2019	UNVR	8,400	7,392,837,000,000	7,630,000,000	968.92	8.67
95	2019	WIKA	1,990	2,621,015,000,000	8,969,951,372	292.20	6.81
96	2019	WSKT	1,485	1,028,898,367,891	13,573,902,600	75.80	19.59



Tabel *Price Earnings Ratio (PER)*

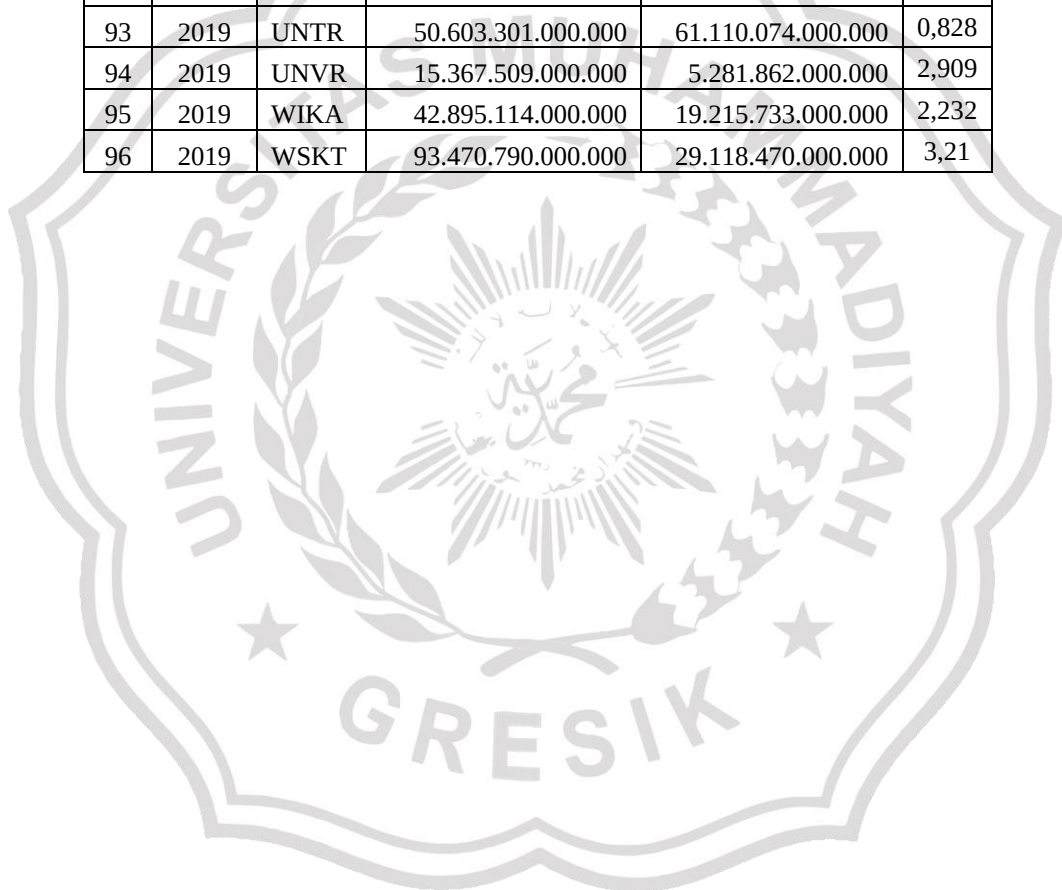
No.	KODE	PER		
		2017	2018	2019
1	ADRO	8.19	5.62	8.23
2	AKRA	19.50	10.79	22.56
3	ANTM	110.03	21.02	104.13
4	ASII	14.51	12.16	10.53
5	BBCA	23.15	24.80	28.84
6	BBNI	13.41	10.87	9.44
7	BBRI	15.46	13.93	15.77
8	BBTN	12.49	9.58	107.29
9	BMRI	17.41	13.31	12.59
10	BSDE	6.46	11.16	9.55
11	EXCL	84.31	-6.42	47.25
12	GGRM	20.79	20.65	9.37
13	HMSP	43.42	31.88	17.80
14	ICBP	29.29	26.16	24.26
15	INCO	-138.80	36.97	45.33
16	INDF	13.01	13.18	11.79
17	INTP	43.45	59.27	38.16
18	JSMR	22.19	15.25	18.11
19	KLBF	32.29	28.53	29.92
20	LPPF	15.30	14.89	8.64
21	MNCN	11.70	6.14	9.89
22	PGAS	12.36	9.73	33.49
23	PTBA	6.23	9.67	7.58
24	PTPP	9.49	5.71	8.13
25	SCMA	27.52	18.54	19.82
26	SMGR	28.74	22.11	30.02
27	SRIL	8.43	5.98	4.36
28	TLKM	13.69	13.77	14.25
29	UNTR	17.21	8.87	7.21
30	UNVR	12.18	7.63	8.67
31	WIKA	10.25	7.16	6.81
32	WSKT	7.14	4.94	19.59

Tabel Perhitungan *Debt to Equity Ratio* (DER)

No.	Tahun	KODE	Total Utang (Rp)	Total Ekuitas (Rp)	DER
1	2017	ADRO	36.884.700.960.000	55.433.362.596.000	0,67
2	2017	AKRA	7.793.559.184.000	9.029.649.347.000	0,86
3	2017	ANTM	11.523.869.935.000	18.490.403.517.000	0,62
4	2017	ASII	139.325.000.000.000	156.505.000.000.000	0,89
5	2017	BBCA	614.940.262.000.000	131.401.694.000.000	4,68
6	2017	BBNI	584.086.818.000.000	100.903.304.000.000	5,79
7	2017	BBRI	959.439.711.000.000	168.007.778.000.000	5,71
8	2017	BBTN	223.937.463.000.000	21.663.434.000.000	10,34
9	2017	BMRI	888.026.817.000.000	170.006.132.000.000	5,22
10	2017	BSDE	16.754.337.000.000	29.196.851.000.000	0,57
11	2017	EXCL	34.690.591.000.000	21.630.850.000.000	1,60
12	2017	GGRM	24.572.266.000.000	42.187.664.000.000	0,58
13	2017	HMSP	9.028.078.000.000	34.112.985.000.000	0,26
14	2017	ICBP	11.295.184.000.000	20.324.330.000.000	0,56
15	2017	INCO	4.947.621.216.000	24.648.784.116.000	0,20
16	2017	INDF	41.182.764.000.000	46.756.724.000.000	0,88
17	2017	INTP	4.307.169.000.000	24.556.507.000.000	0,18
18	2017	JSMR	60.833.333.269.000	18.359.439.521.000	3,31
19	2017	KLBF	2.722.207.633.646	13.894.031.782.689	0,20
20	2017	LPPF	3.099.441.000.000	2.327.985.000.000	1,33
21	2017	MNCN	5.256.208.000.000	9.801.083.000.000	0,54
22	2017	PGAS	52.468.242.181.308	58.397.483.737.308	0,90
23	2017	PTBA	8.187.497.000.000	13.799.985.000.000	0,59
24	2017	PTPP	27.539.670.000.000	14.243.110.000.000	1,93
25	2017	SCMA	980.414.618.000	4.405.393.260.000	0,22
26	2017	SMGR	19.022.618.000.000	30.046.032.000.000	0,63
27	2017	SRIL	10.171.055.447.532	5.990.367.815.292	1,70
28	2017	TLKM	86.354.000.000.000	112.130.000.000.000	0,77
29	2017	UNTR	34.724.168.000.000	47.537.925.000.000	0,73
30	2017	UNVR	13.733.025.000.000	5.173.388.000.000	2,65
31	2017	WIKA	31.051.950.000.000	14.631.825.000.000	2,12
32	2017	WSKT	75.140.940.000.000	22.754.820.000.000	3,30
33	2018	ADRO	39.939.510.303.000	62.307.282.852.000	0,64
34	2018	AKRA	10.014.019.260.000	9.926.831.339.000	1,01
35	2018	ANTM	13.567.160.084.000	19.739.230.723.000	0,69
36	2018	ASII	170.348.000.000.000	174.363.000.000.000	0,98
37	2018	BBCA	668.438.779.000.000	151.753.427.000.000	4,40
38	2018	BBNI	671.237.546.000.000	110.373.789.000.000	6,08

No.	Tahun	KODE	Total Utang (Rp)	Total Ekuitas (Rp)	DER
39	2018	BBRI	1.111.622.961.000.000	185.275.331.000.000	6,00
40	2018	BBTN	263.784.017.000.000	23.840.448.000.000	11,06
41	2018	BMRI	941.953.100.000.000	184.960.305.000.000	5,09
42	2018	BSDE	21.814.594.000.000	30.286.898.000.000	0,72
43	2018	EXCL	39.271.000.000.000	18.343.000.000.000	2,14
44	2018	GGRM	23.963.934.000.000	45.133.285.000.000	0,53
45	2018	HMSP	11.244.167.000.000	35.358.253.000.000	0,32
46	2018	ICBP	11.660.003.000.000	22.707.150.000.000	0,51
47	2018	INCO	4.615.456.725.000	27.278.250.687.000	0,17
48	2018	INDF	46.620.996.000.000	49.916.800.000.000	0,93
49	2018	INTP	4.566.973.000.000	23.221.589.000.000	0,20
50	2018	JSMR	62.219.614.000.000	20.198.989.000.000	3,08
51	2018	KLBF	2.851.611.349.015	15.294.594.796.354	0,19
52	2018	LPPF	3.220.568.000.000	1.815.828.000.000	1,77
53	2018	MNCN	5.697.247.000.000	10.642.305.000.000	0,54
54	2018	PGAS	68.602.035.345.336	46.366.579.385.991	1,48
55	2018	PTBA	7.903.237.000.000	16.269.696.000.000	0,49
56	2018	PTPP	36.233.539.000.000	16.315.612.000.000	2,22
57	2018	SCMA	1.138.592.812.000	5.451.250.131.000	0,21
58	2018	SMGR	18.168.521.000.000	32.615.315.000.000	0,56
59	2018	SRIL	12.280.242.205.260	7.475.780.496.411	1,64
60	2018	TLKM	88.893.000.000.000	117.303.000.000.000	0,76
61	2018	UNTR	59.230.338.000.000	57.050.679.000.000	1,04
62	2018	UNVR	12.943.202.000.000	7.383.667.000.000	1,75
63	2018	WIKA	42.014.687.000.000	17.215.315.000.000	2,44
64	2018	WSKT	95.504.460.000.000	28.887.120.000.000	3,31
65	2019	ADRO	44.951.802.710.000	55.373.173.895.000	0,81
66	2019	AKRA	11.342.184.833.000	10.066.861.340.000	1,13
67	2019	ANTM	12.061.488.555.000	18.133.419.175.000	0,67
68	2019	ASII	165.195.000.000.000	186.763.000.000.000	0,88
69	2019	BBCA	740.067.127.000.000	174.143.156.000.000	4,25
70	2019	BBNI	688.489.442.000.000	125.003.948.000.000	5,51
71	2019	BBRI	1.207.974.504.000.000	208.784.336.000.000	5,79
72	2019	BBTN	269.451.682.000.000	23.836.195.000.000	11,30
73	2019	BMRI	1.025.749.580.000.000	209.034.525.000.000	4,91
74	2019	BSDE	20.897.343.000.000	33.547.506.000.000	0,62
75	2019	EXCL	43.603.000.000.000	18.899.000.000.000	2,31
76	2019	GGRM	27.716.516.000.000	50.930.758.000.000	0,54
77	2019	HMSP	15.223.076.000.000	35.679.730.000.000	0,43
78	2019	ICBP	12.038.210.000.000	26.671.104.000.000	0,45
79	2019	INCO	3.906.111.495.000	26.991.474.393.000	0,14
80	2019	INDF	41.996.071.000.000	54.202.488.000.000	0,77

No.	Tahun	KODE	Total Utang (Rp)	Total Ekuitas (Rp)	DER
81	2019	INTP	4.627.488.000.000	23.080.261.000.000	0,20
82	2019	JSMR	76.493.833.000.000	23.185.737.000.000	3,30
83	2019	KLBF	3.559.144.386.553	16.705.582.476.031	0,21
84	2019	LPPF	3.086.283.000.000	1.746.627.000.000	1,77
85	2019	MNCN	5.310.928.000.000	12.525.502.000.000	0,424
86	2019	PGAS	57.541.970.034.775	44.960.016.546.781	1,28
87	2019	PTBA	7.675.226.000.000	18.422.826.000.000	0,417
88	2019	PTPP	41.839.415.000.000	17.326.133.000.000	2,415
89	2019	SCMA	1.228.125.546.000	5.488.598.527.000	0,224
90	2019	SMGR	43.915.143.000.000	33.891.924.000.000	1,296
91	2019	SRIL	13.436.470.922.446	8.238.687.723.809	1,631
92	2019	TLKM	103.958.000.000.000	117.250.000.000.000	0,887
93	2019	UNTR	50.603.301.000.000	61.110.074.000.000	0,828
94	2019	UNVR	15.367.509.000.000	5.281.862.000.000	2,909
95	2019	WIKA	42.895.114.000.000	19.215.733.000.000	2,232
96	2019	WSKT	93.470.790.000.000	29.118.470.000.000	3,21



Tabel Debt to Equity Ratio (DER)

No.	KODE	DER		
		2017	2018	2019
1	ADRO	0.67	0.64	0.81
2	AKRA	0.86	1.01	1.13
3	ANTM	0.62	0.69	0.67
4	ASII	0.89	0.98	0.88
5	BBCA	4.68	4.40	4.25
6	BBNI	5.79	6.08	5.51
7	BBRI	5.71	6.00	5.79
8	BBTN	10.34	11.06	11.30
9	BMRI	5.22	5.09	4.91
10	BSDE	0.57	0.72	0.62
11	EXCL	1.60	2.14	2.31
12	GGRM	0.58	0.53	0.54
13	HMSP	0.26	0.32	0.43
14	ICBP	0.56	0.51	0.45
15	INCO	0.20	0.17	0.14
16	INDF	0.88	0.93	0.77
17	INTP	0.18	0.20	0.20
18	JSMR	3.31	3.08	3.30
19	KLBF	0.20	0.19	0.21
20	LPPF	1.33	1.77	1.77
21	MNCN	0.54	0.54	0.42
22	PGAS	0.90	1.48	1.28
23	PTBA	0.59	0.49	0.42
24	PTPP	1.93	2.22	2.41
25	SCMA	0.22	0.21	0.22
26	SMGR	0.63	0.56	1.30
27	SRIL	1.70	1.64	1.63
28	TLKM	0.77	0.76	0.89
29	UNTR	0.73	1.04	0.83
30	UNVR	2.65	1.75	2.91
31	WIKA	2.12	2.44	2.23
32	WSKT	3.30	3.31	3.21

Tabel Perhitungan Dividend Payout Ration (DPR)

No.	Tahun	KODE	Total Dividen Dibagikan (Rp)	Saham Beredar	DPS	EPS	DPR
1	2017	ADRO	3.487.562.590.000	31.985.962.000	109,03	227,21	0,48
2	2017	AKRA	801.483.719.000	4.006.329.420	200,05	325,63	0,61
3	2017	ANTM	47.777.374.000	24.030.764.725	1,99	5,68	0,35
4	2017	ASII	7.489.457.330.900	40.483.553.140	185,00	572,21	0,32
5	2017	BBCA	6.287.027.000.000	24.655.010.000	255,00	945,90	0,27
6	2017	BBNI	4.765.767.000.000	18.648.656.458	255,56	738,42	0,35
7	2017	BBRI	13.048.441.000.000	123.345.810.000	105,79	235,47	0,45
8	2017	BBTN	605.493.000.000	10.590.000.000	57,18	285,88	0,20
9	2017	BMRI	9.287.857.000.000	46.666.666.666	199,03	459,49	0,43
10	2017	BSDE	96.233.480.960	19.246.696.192	5,00	263,03	0,02
11	2017	EXCL	0	10.687.960.423	0,00	35,11	0,00
12	2017	GGRM	5.002.629.000.000	1.924.088.000	2.600,00	4.030,66	0,65
13	2017	HMSP	12.480.000.000.000	116.318.076.900	107,29	108,93	0,98
14	2017	ICBP	1.889.229.000.000	11.661.908.000	162,00	303,82	0,53
15	2017	INCO	0	9.936.338.720	0,00	-0,02	0,00
16	2017	INDF	2.080.961.080.500	8.780.426.500	237,00	585,97	0,40
17	2017	INTP	2.576.020.000.000	3.681.231.699	699,77	505,22	1,39
18	2017	JSMR	440.051.270.000	7.257.871.200	60,63	288,47	0,21
19	2017	KLBF	1.171.878.052.750	46.875.122.110	25,00	52,34	0,48
20	2017	LPPF	1.334.948.000.000	2.917.918.080	457,50	653,57	0,70
21	2017	MNCN	209.235.000.000	14.276.103.500	14,66	109,80	0,13
22	2017	PGAS	766.274.074.076	24.241.508.196	31,61	141,56	0,22
23	2017	PTBA	3.357.331.000.000	11.520.659.245	291,42	394,70	0,74
24	2017	PTPP	290.628.000.000	6.199.897.354	46,88	278,05	0,17
25	2017	SCMA	804.175.207.000	14.621.601.234	55,00	90,12	0,61
26	2017	SMGR	805.680.000.000	5.931.520.000	135,83	344,44	0,39
27	2017	SRIL	163.617.414.752	20.452.176.844	8,00	45,07	0,18
28	2017	TLKM	16.609.000.000.000	100.799.996.400	164,77	324,41	0,51
29	2017	UNTR	3.331.000.000.000	3.730.135.136	893,00	2.057,12	0,43
30	2017	UNVR	3.853.150.000.000	7.630.000.000	505,00	918,03	0,55
31	2017	WIKA	240.413.755.000	8.969.951.372	26,80	151,18	0,18
32	2017	WSKT	776.342.383.468	13.573.902.600	57,19	309,53	0,18
33	2018	ADRO	1.087.290.655.000	31.985.962.000	33,99	216,20	0,16
34	2018	AKRA	963.526.780.000	4.014.694.920	240,00	397,70	0,60
35	2018	ANTM	306.048.761.000	24.030.764.725	12,74	36,39	0,35
36	2018	ASII	8.668.743.233.868	40.483.553.140	214,13	676,13	0,32
37	2018	BBCA	8.382.704.000.000	24.655.010.000	340,00	1.048,54	0,32
38	2018	BBNI	3.753.780.000.000	18.648.656.458	201,29	809,27	0,25

No.	Tahun	KODE	Total Dividen Dibagikan (Rp)	Saham Beredar	DPS	EPS	DPR
39	2018	BBRI	16.175.567.000.000	123.345.810.000	131,14	262,83	0,50
40	2018	BBTN	561.585.000.000	10.590.000.000	53,03	265,15	0,20
41	2018	BMRI	11.256.759.000.000	46.666.666.666	241,22	553,97	0,44
42	2018	BSDE	0	19.246.696.192	0,00	112,50	0,00
43	2018	EXCL	0	10.687.960.423	0,00	-308,47	0,00
44	2018	GGRM	5.002.629.000.000	1.924.088.000	2.600,00	4.050,27	0,64
45	2018	HMSP	13.630.000.000.000	116.318.076.900	117,18	116,39	1,01
46	2018	ICBP	2.274.072.000.000	11.661.908.000	195,00	399,49	0,49
47	2018	INCO	0	9.936.338.720	0,00	88,19	0,00
48	2018	INDF	2.072.181.000.000	8.780.426.500	236,00	565,10	0,42
49	2018	INTP	2.024.015.000.000	3.681.231.699	549,82	311,29	1,77
50	2018	JSMR	330.390.000.000	7.257.871.200	45,52	280,59	0,16
51	2018	KLBF	1.218.753.174.860	46.875.122.110	26,00	53,27	0,49
52	2018	LPPF	933.600.000.000	2.917.918.080	319,95	376,07	0,85
53	2018	MNCN	214.141.000.000	14.276.103.500	15,00	112,47	0,13
54	2018	PGAS	1.381.523.552.090	24.241.508.196	56,99	217,82	0,26
55	2018	PTBA	3.767.959.000.000	11.520.659.250	327,06	444,52	0,74
56	2018	PTPP	300.397.000.000	6.199.897.354	48,45	315,97	0,15
57	2018	SCMA	820.266.658.000	14.621.601.234	56,10	100,88	0,56
58	2018	SMGR	1.231.646.000.000	5.931.520.000	207,64	520,22	0,40
59	2018	SRIL	61.356.530.532	20.452.176.844	3,00	59,87	0,05
60	2018	TLKM	16.229.000.000.000	99.062.216.600	163,83	272,34	0,60
61	2018	UNTR	4.450.100.000.000	3.730.135.136	1.193,01	3.082,57	0,39
62	2018	UNVR	5.913.250.000.000	7.630.000.000	775,00	1.190,19	0,65
63	2018	WIKA	346.051.732.000	8.969.951.372	38,58	231,14	0,17
64	2018	WSKT	990.709.507.966	13.573.902.600	72,99	340,33	0,21
65	2019	ADRO	2.094.345.454.000	31.985.962.000	65,48	189,05	0,35
66	2019	AKRA	441.616.441.000	4.014.694.920	110,00	175,13	0,63
67	2019	ANTM	67.847.902.000	24.030.764.725	2,82	8,07	0,35
68	2019	ASII	8.700.000.000.000	40.483.553.140	214,90	657,58	0,33
69	2019	BBCA	13.683.531.000.000	24.655.010.000	555,00	1.158,79	0,48
70	2019	BBNI	3.846.119.000.000	18.648.656.458	206,24	831,62	0,25
71	2019	BBRI	20.623.565.000.000	123.345.810.000	167,20	279,00	0,60
72	2019	BBTN	20.926.000.000	10.590.000.000	1,98	19,76	0,10
73	2019	BMRI	16.489.280.000.000	46.666.666.666	353,34	609,76	0,58
74	2019	BSDE	0	19.246.696.192	0,00	131,42	0,00
75	2019	EXCL	0	10.687.960.423	0,00	66,67	0,00
76	2019	GGRM	5.002.629.000.000	1.924.088.000	2.600,00	5.654,99	0,46
77	2019	HMSP	13.930.000.000.000	116.318.076.900	119,76	117,97	1,02
78	2019	ICBP	2.507.310.000.000	11.661.908.000	215,00	459,62	0,47
79	2019	INCO	0	9.936.338.720	0,00	80,30	0,00
80	2019	INDF	2.440.959.000.000	8.780.426.500	278,00	672,26	0,41

No.	Tahun	KODE	Total Dividen Dibagikan (Rp)	Saham Beredar	DPS	EPS	DPR
81	2019	INTP	2.024.015.000.000	3.681.231.699	549,82	498,56	1,10
82	2019	JSMR	110.356.000.000	7.257.871.200	15,21	285,74	0,05
83	2019	KLBF	937.502.442.200	46.875.122.110	20,00	54,14	0,37
84	2019	LPPF	0	2.804.883.280	0,00	487,32	0,00
85	2019	MNCN	0	14.276.103.500	0,00	164,79	0,00
86	2019	PGAS	1.007.477.080.626	24.241.508.196	41,56	64,79	0,64
87	2019	PTBA	3.651.200.000.000	11.520.659.250	316,93	350,71	0,90
88	2019	PTPP	182.572.000.000	6.199.897.354	29,45	194,89	0,15
89	2019	SCMA	744.680.000.000	14.774.672.301	50,40	71,15	0,71
90	2019	SMGR	239.215.000.000	5.931.520.000	40,33	399,77	0,10
91	2019	SRIL	20.452.176.844	20.452.176.844	1,00	59,58	0,02
92	2019	TLKM	15.262.000.000.000	99.062.216.600	154,06	278,53	0,55
93	2019	UNTR	4.524.700.000.000	3.730.135.136	1.213,01	2.985,05	0,41
94	2019	UNVR	4.082.050.000.000	7.630.000.000	535,00	968,92	0,55
95	2019	WIKA	0	8.969.951.372	0,00	292,20	0,00
96	2019	WSKT	46.907.502.471	13.573.902.600	3,46	75,80	0,05



Tabel Dividend Payout Ratio (DPR)

No.	KODE	DPR		
		2017	2018	2019
1	ADRO	0,48	0,16	0,35
2	AKRA	0,61	0,60	0,63
3	ANTM	0,35	0,35	0,35
4	ASII	0,32	0,32	0,33
5	BBCA	0,27	0,32	0,48
6	BBNI	0,35	0,25	0,25
7	BBRI	0,45	0,50	0,60
8	BBTN	0,20	0,20	0,10
9	BMRI	0,43	0,44	0,58
10	BSDE	0,02	0,00	0,00
11	EXCL	0,00	0,00	0,00
12	GGRM	0,65	0,64	0,46
13	HMSP	0,98	1,01	1,02
14	ICBP	0,53	0,49	0,47
15	INCO	0,00	0,00	0,00
16	INDF	0,40	0,42	0,41
17	INTP	1,39	1,77	1,10
18	JSMR	0,21	0,16	0,05
19	KLBF	0,48	0,49	0,37
20	LPPF	0,70	0,85	0,00
21	MNCN	0,13	0,13	0,00
22	PGAS	0,22	0,26	0,64
23	PTBA	0,74	0,74	0,90
24	PTPP	0,17	0,15	0,15
25	SCMA	0,61	0,56	0,71
26	SMGR	0,39	0,40	0,10
27	SRIL	0,18	0,05	0,02
28	TLKM	0,51	0,60	0,55
29	UNTR	0,43	0,39	0,41
30	UNVR	0,55	0,65	0,55
31	WIKA	0,18	0,17	0,00
32	WSKT	0,18	0,21	0,05

Lampiran 11

Tabel Perhitungan Ukuran Perusahaan (SIZE)

No.	KODE	ASET (Rp)			SIZE		
		2017	2018	2019	2017	2018	2019
1	ADRO	92.318.063.556.000	102.246.793.155.000	100.324.976.605.000	32,16	32,26	32,24
2	AKRA	16.823.208.531.000	19.940.850.599.000	21.409.046.173.000	30,45	30,62	30,69
3	ANTM	30.014.273.452.000	33.306.390.807.000	30.194.907.730.000	31,03	31,14	31,04
4	ASII	295.830.000.000.000	344.711.000.000.000	351.958.000.000.000	33,32	33,47	33,49
5	BBCA	750.319.671.000.000	824.787.944.000.000	918.989.312.000.000	34,25	34,35	34,45
6	BBNI	709.330.084.000.000	808.572.011.000.000	845.605.208.000.000	34,20	34,33	34,37
7	BBRI	1.127.447.489.000.000	1.296.898.292.000.000	1.416.758.840.000.000	34,66	34,80	34,89
8	BBTN	261.365.267.000.000	306.436.194.000.000	311.776.828.000.000	33,20	33,36	33,37
9	BMRI	1.124.700.847.000.000	1.202.252.094.000.000	1.318.246.335.000.000	34,66	34,72	34,82
10	BSDE	45.951.188.000.000	52.101.492.000.000	54.444.849.000.000	31,46	31,58	31,63
11	EXCL	56.321.441.000.000	57.613.954.000.000	62.725.000.000.000	31,66	31,68	31,77
12	GGRM	66.759.930.000.000	69.097.219.000.000	78.647.274.000.000	31,83	31,87	32,00
13	HMSF	43.141.063.000.000	46.602.420.000.000	50.902.806.000.000	31,40	31,47	31,56
14	ICBP	31.619.514.000.000	34.367.153.000.000	38.709.314.000.000	31,08	31,17	31,29
15	INCO	29.596.405.332.000	31.893.707.412.000	30.897.585.888.000	31,02	31,09	31,06
16	INDF	88.400.877.000.000	96.537.796.000.000	96.198.559.000.000	32,11	32,20	32,20
17	INTP	28.863.676.000.000	27.788.562.000.000	27.707.749.000.000	30,99	30,96	30,95
18	JSMR	79.192.772.790.000	82.418.600.790.000	99.679.570.000.000	32,00	32,04	32,23
19	KLBF	16.616.239.416.335	18.146.206.145.369	20.264.726.862.584	30,44	30,53	30,64
20	LPPF	5.427.426.000.000	5.036.396.000.000	4.832.910.000.000	29,32	29,25	29,21
21	MNCN	15.057.291.000.000	16.339.552.000.000	17.836.430.000.000	30,34	30,42	30,51
22	PGAS	110.865.725.918.616	114.968.614.731.327	102.501.986.581.556	32,34	32,38	32,26
23	PTBA	21.987.482.000.000	24.172.933.000.000	26.098.052.000.000	30,72	30,82	30,89
24	PTPP	41.782.781.000.000	52.549.151.000.000	59.165.548.000.000	31,36	31,59	31,71
25	SCMA	5.385.807.878.000	6.589.842.943.000	6.716.724.073.000	29,31	29,52	29,54
26	SMGR	49.068.650.000.000	50.783.836.000.000	79.807.067.000.000	31,52	31,56	32,01
27	SRIL	16.161.423.262.824	19.756.022.701.671	21.675.158.646.255	30,41	30,61	30,71
28	TLKM	198.484.000.000.000	206.196.000.000.000	221.208.000.000.000	32,92	32,96	33,03
29	UNTR	82.262.093.000.000	116.281.017.000.000	111.713.375.000.000	32,04	32,39	32,35
30	UNVR	18.906.413.000.000	20.326.869.000.000	20.649.371.000.000	30,57	30,64	30,66
31	WIKA	45.683.774.302.000	59.230.001.239.000	62.110.846.000.000	31,45	31,71	31,76
32	WSKT	97.895.760.838.624	124.391.581.623.636	122.589.259.350.571	32,21	32,45	32,44

Tabel Ukuran Perusahaan (*SIZE*)

No.	KODE	SIZE		
		2017	2018	2019
1	ADRO	32,16	32,26	32,24
2	AKRA	30,45	30,62	30,69
3	ANTM	31,03	31,14	31,04
4	ASII	33,32	33,47	33,49
5	BBCA	34,25	34,35	34,45
6	BBNI	34,20	34,33	34,37
7	BBRI	34,66	34,80	34,89
8	BBTN	33,20	33,36	33,37
9	BMRI	34,66	34,72	34,82
10	BSDE	31,46	31,58	31,63
11	EXCL	31,66	31,68	31,77
12	GGRM	31,83	31,87	32,00
13	HMSP	31,40	31,47	31,56
14	ICBP	31,08	31,17	31,17
15	INCO	31,02	31,09	31,06
16	INDF	32,11	32,20	32,20
17	INTP	30,99	30,96	30,95
18	JSMR	32,00	32,04	32,23
19	KLBF	30,44	30,53	30,64
20	LPPF	29,32	29,25	29,21
21	MNCN	30,34	30,42	30,51
22	PGAS	32,34	32,38	32,26
23	PTBA	30,72	30,82	30,89
24	PTPP	31,36	31,59	31,71
25	SCMA	29,31	29,52	29,54
26	SMGR	31,52	31,56	32,01
27	SRIL	30,41	30,61	30,71
28	TLKM	32,92	32,96	33,03
29	UNTR	32,04	32,39	32,35
30	UNVR	30,57	30,64	30,66
31	WIKA	31,45	31,71	31,76
32	WSKT	32,21	32,45	32,44

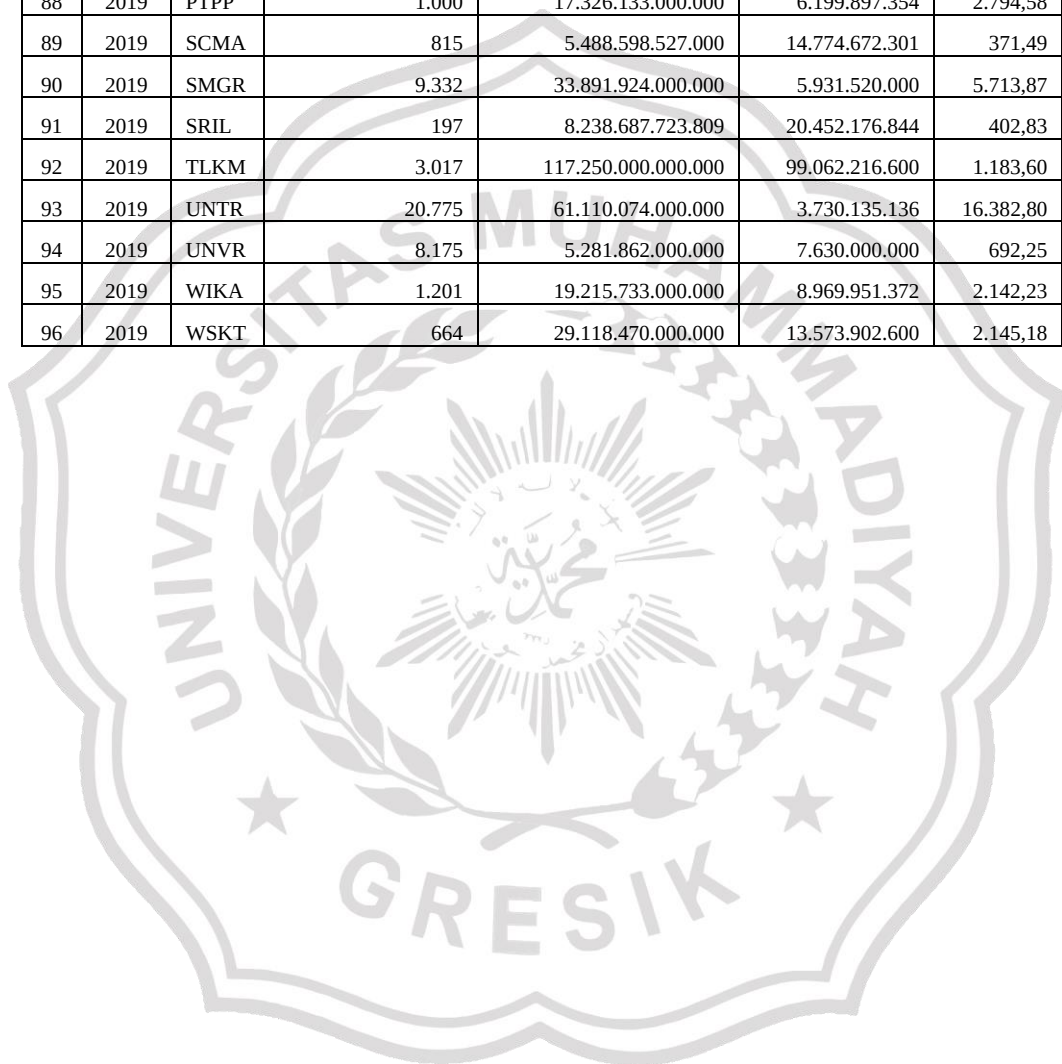
Lampiran 13

Tabel Perhitungan Nilai Perusahaan (PBV)

No.	Tahun	KODE	Harga Saham (Rp)	Total Ekuitas (Rp)	Saham Beredar	BV	PBV
1	2017	ADRO	1.729	55.433.362.596.000	31.985.962.000	1.733,05	1,00
2	2017	AKRA	4.706	9.029.649.347.000	4.006.329.420	2.253,85	2,09
3	2017	ANTM	832	18.490.403.517.000	24.030.764.725	769,45	1,08
4	2017	ASII	7.175	156.505.000.000.000	40.483.553.140	3.865,89	1,86
5	2017	BBCA	22.250	131.401.694.000.000	24.655.010.000	5.329,61	4,17
6	2017	BBNI	7.707	100.903.304.000.000	18.648.656.458	5.410,75	1,42
7	2017	BBRI	3.139	168.007.778.000.000	123.345.810.000	1.362,09	2,30
8	2017	BBTN	2.939	21.663.434.000.000	10.590.000.000	2.045,65	1,44
9	2017	BMRI	6.932	170.006.132.000.000	46.666.666.666	3.642,99	1,90
10	2017	BSDE	1.606	29.196.851.000.000	19.246.696.192	1.516,98	1,06
11	2017	EXCL	1.972	21.630.850.000.000	10.687.960.423	2.023,85	0,97
12	2017	GGRM	68.939	42.187.664.000.000	1.924.088.000	21.926,06	3,14
13	2017	HMSP	3.439	34.112.985.000.000	116.318.076.900	293,27	11,72
14	2017	ICBP	8.636	20.324.330.000.000	11.661.908.000	1.742,80	4,96
15	2017	INCO	3.159	24.648.784.116.000	9.936.338.720	2.480,67	1,27
16	2017	INDF	6.646	46.756.724.000.000	8.780.426.500	5.325,11	1,25
17	2017	INTP	17.221	24.556.507.000.000	3.681.231.699	6.670,73	2,58
18	2017	JSMR	4.224	18.359.439.521.000	7.257.871.200	2.529,59	1,67
19	2017	KLBF	1.471	13.894.031.782.689	46.875.122.110	296,41	4,96
20	2017	LPPF	9.686	2.327.985.000.000	2.917.918.080	797,82	12,14
21	2017	MNCN	1.191	9.801.083.000.000	14.276.103.500	686,54	1,73
22	2017	PGAS	1.937	58.397.483.737.308	24.241.508.196	2.408,99	0,80
23	2017	PTBA	2.893	13.799.985.000.000	11.520.659.245	1.197,85	2,42
24	2017	PTPP	2.276	14.243.110.000.000	6.199.897.354	2.297,31	0,99
25	2017	SCMA	2.683	4.405.393.260.000	14.621.601.234	301,29	8,90
26	2017	SMGR	9.239	30.046.032.000.000	5.931.520.000	5.065,49	1,82
27	2017	SRIL	335	5.990.367.815.292	20.452.176.844	292,90	1,14
28	2017	TLKM	3.774	112.130.000.000.000	100.799.996.400	1.112,40	3,39
29	2017	UNTR	33.375	47.537.925.000.000	3.730.135.136	12.744,29	2,62
30	2017	UNVR	9.261	5.173.388.000.000	7.630.000.000	678,03	13,66
31	2017	WIKA	1.452	14.631.825.000.000	8.969.951.372	1.631,20	0,89
32	2017	WSKT	2.054	22.754.820.000.000	13.573.902.600	1.676,37	1,23
33	2018	ADRO	1.284	62.307.282.852.000	31.985.962.000	1.947,96	0,66
34	2018	AKRA	4.777	9.926.831.339.000	4.014.694.920	2.472,62	1,93
35	2018	ANTM	914	19.739.230.723.000	24.030.764.725	821,42	1,11
36	2018	ASII	7.514	174.363.000.000.000	40.483.553.140	4.307,01	1,74
37	2018	BBCA	27.639	151.753.427.000.000	24.655.010.000	6.155,07	4,49
38	2018	BBNI	8.325	110.373.789.000.000	18.648.656.458	5.918,59	1,41

No.	Tahun	KODE	Harga Saham (Rp)	Total Ekuitas (Rp)	Saham Beredar	BV	PBV
39	2018	BBRI	4.390	185.275.331.000.000	123.345.810.000	1.502,08	2,92
40	2018	BBTN	2.533	23.840.448.000.000	10.590.000.000	2.251,22	1,13
41	2018	BMRI	7.711	184.960.305.000.000	46.666.666.666	3.963,44	1,95
42	2018	BSDE	1.403	30.286.898.000.000	19.246.696.192	1.573,62	0,89
43	2018	EXCL	2.677	18.343.000.000.000	10.687.960.423	1.716,23	1,56
44	2018	GGRM	82.504	45.133.285.000.000	1.924.088.000	23.456,98	3,52
45	2018	HMSP	3.531	35.358.253.000.000	116.318.076.900	303,98	11,62
46	2018	ICBP	9.475	22.707.150.000.000	11.661.908.000	1.947,12	4,87
47	2018	INCO	3.653	27.278.250.687.000	9.936.338.720	2.745,30	1,33
48	2018	INDF	6.682	49.916.800.000.000	8.780.426.500	5.685,01	1,18
49	2018	INTP	21.332	23.221.589.000.000	3.681.231.699	6.308,10	3,38
50	2018	JSMR	6.071	20.198.989.000.000	7.257.871.200	2.783,05	2,18
51	2018	KLBF	1.514	15.294.594.796.354	46.875.122.110	326,28	4,64
52	2018	LPPF	3.877	1.815.828.000.000	2.917.918.080	622,30	6,23
53	2018	MNCN	1.043	10.642.305.000.000	14.276.103.500	745,46	1,40
54	2018	PGAS	2.277	46.366.579.385.991	24.241.508.196	1.912,69	1,19
55	2018	PTBA	4.020	16.269.696.000.000	11.520.659.250	1.412,22	2,85
56	2018	PTPP	2.211	16.315.612.000.000	6.199.897.354	2.631,59	0,84
57	2018	SCMA	1.644	5.451.250.131.000	14.621.601.234	372,82	4,41
58	2018	SMGR	10.800	32.615.315.000.000	5.931.520.000	5.498,64	1,96
59	2018	SRIL	337	7.475.780.496.411	20.452.176.844	365,52	0,92
60	2018	TLKM	3.833	117.303.000.000.000	99.062.216.600	1.184,13	3,24
61	2018	UNTR	27.432	57.050.679.000.000	3.730.135.136	15.294,53	1,79
62	2018	UNVR	9.625	7.383.667.000.000	7.630.000.000	967,72	9,95
63	2018	WIKA	2.197	17.215.315.000.000	8.969.951.372	1.919,22	1,14
64	2018	WSKT	1.895	28.887.120.000.000	13.573.902.600	2.128,14	0,89
65	2019	ADRO	1.089	55.373.173.895.000	31.985.962.000	1.731,17	0,63
66	2019	AKRA	2.791	10.066.861.340.000	4.014.694.920	2.507,50	1,11
67	2019	ANTM	711	18.133.419.175.000	24.030.764.725	754,59	0,94
68	2019	ASII	5.090	186.763.000.000.000	40.483.553.140	4.613,31	1,10
69	2019	BBCA	30.779	174.143.156.000.000	24.655.010.000	7.063,20	4,36
70	2019	BBNI	4.611	125.003.948.000.000	18.648.656.458	6.703,11	0,69
71	2019	BBRI	3.113	208.784.336.000.000	123.345.810.000	1.692,67	1,84
72	2019	BBTN	1.268	23.836.195.000.000	10.590.000.000	2.250,82	0,56
73	2019	BMRI	5.718	209.034.525.000.000	46.666.666.666	4.479,31	1,28
74	2019	BSDE	709	33.547.506.000.000	19.246.696.192	1.743,03	0,41
75	2019	EXCL	2.647	18.899.000.000.000	10.687.960.423	1.768,25	1,50
76	2019	GGRM	48.707	50.930.758.000.000	1.924.088.000	26.470,08	1,84
77	2019	HMSP	1.696	35.679.730.000.000	116.318.076.900	306,74	5,53
78	2019	ICBP	9.179	26.671.104.000.000	11.661.908.000	2.287,03	4,01
79	2019	INCO	3.371	26.991.474.393.000	9.936.338.720	2.716,44	1,24
80	2019	INDF	6.489	54.202.488.000.000	8.780.426.500	6.173,10	1,05

No.	Tahun	KODE	Harga Saham (Rp)	Total Ekuitas (Rp)	Saham Beredar	BV	PBV
81	2019	INTP	12.279	23.080.261.000.000	3.681.231.699	6.269,71	1,96
82	2019	JSMR	4.016	23.185.737.000.000	7.257.871.200	3.194,56	1,26
83	2019	KLBF	1.557	16.705.582.476.031	46.875.122.110	356,38	4,37
84	2019	LPPF	1.331	1.746.627.000.000	2.804.883.280	622,71	2,14
85	2019	MNCN	852	12.525.502.000.000	14.276.103.500	877,38	0,97
86	2019	PGAS	1.230	44.960.016.546.781	24.241.508.196	1.854,67	0,66
87	2019	PTBA	2.353	18.422.826.000.000	11.520.659.250	1.599,11	1,47
88	2019	PTPP	1.000	17.326.133.000.000	6.199.897.354	2.794,58	0,36
89	2019	SCMA	815	5.488.598.527.000	14.774.672.301	371,49	2,19
90	2019	SMGR	9.332	33.891.924.000.000	5.931.520.000	5.713,87	1,63
91	2019	SRIL	197	8.238.687.723.809	20.452.176.844	402,83	0,49
92	2019	TLKM	3.017	117.250.000.000.000	99.062.216.600	1.183,60	2,55
93	2019	UNTR	20.775	61.110.074.000.000	3.730.135.136	16.382,80	1,27
94	2019	UNVR	8.175	5.281.862.000.000	7.630.000.000	692,25	11,81
95	2019	WIKA	1.201	19.215.733.000.000	8.969.951.372	2.142,23	0,56
96	2019	WSKT	664	29.118.470.000.000	13.573.902.600	2.145,18	0,31



Tabel Nilai Perusahaan (PBV)

No.	KODE	PBV		
		2017	2018	2019
1	ADRO	1,00	0,66	0,63
2	AKRA	2,09	1,93	1,11
3	ANTM	1,08	1,11	0,94
4	ASII	1,86	1,74	1,10
5	BBCA	4,17	4,49	4,36
6	BBNI	1,42	1,41	0,69
7	BBRI	2,30	2,92	1,84
8	BBTN	1,44	1,13	0,56
9	BMRI	1,90	1,95	1,28
10	BSDE	1,06	0,89	0,41
11	EXCL	0,97	1,56	1,50
12	GGRM	3,14	3,52	1,84
13	HMSP	11,72	11,62	5,53
14	ICBP	4,96	4,87	4,01
15	INCO	1,27	1,33	1,24
16	INDF	1,25	1,18	1,05
17	INTP	2,58	3,38	1,96
18	JSMR	1,67	2,18	1,26
19	KLBF	4,96	4,64	4,37
20	LPPF	12,14	6,23	2,14
21	MNCN	1,73	1,40	0,97
22	PGAS	0,80	1,19	0,66
23	PTBA	2,42	2,85	1,47
24	PTPP	0,99	0,84	0,36
25	SCMA	8,90	4,41	2,19
26	SMGR	1,82	1,96	1,63
27	SRIL	1,14	0,92	0,49
28	TLKM	3,39	3,24	2,55
29	UNTR	2,62	1,79	1,27
30	UNVR	13,66	9,95	11,81
31	WIKA	0,89	1,14	0,56
32	WSKT	1,23	0,89	0,31

Hasil Output SPSS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PER	70	-6.42	38.16	15.3717	9.03416
DER	70	.17	5.22	1.3917	1.26497
DPR	70	.00	1.10	.3560	.25541
SIZE	70	29.21	34.82	31.7301	1.18587
PBV	70	.31	5.53	1.9904	1.35168
Valid N (listwise)	70				

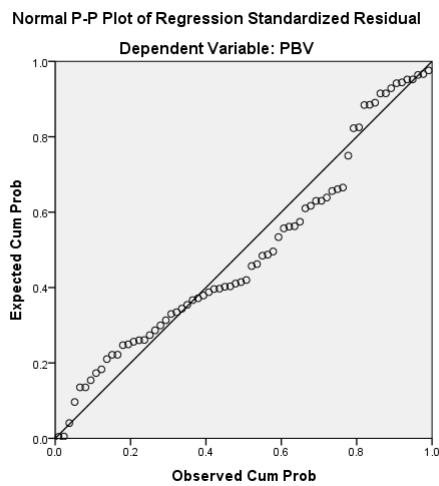
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		70
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.05954914
Most Extreme Differences	Absolute	.102
	Positive	.102
	Negative	-.077
Test Statistic		.102
Asymp. Sig. (2-tailed)		.071 ^c

a. Test distribution is Normal.

b. Calculated from data.

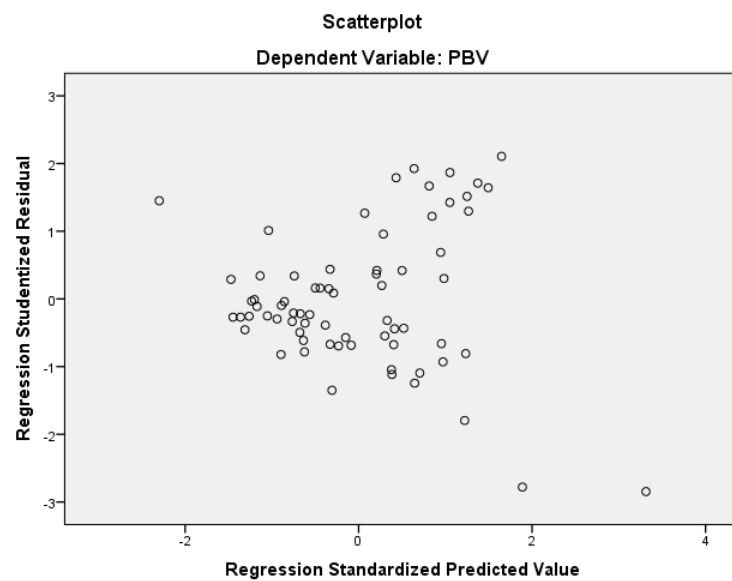
c. Lilliefors Significance Correction.



Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.750	4.372		.629	.531		
	PER	.059	.016	.398	3.801	.000	.865	1.157
	DER	.081	.140	.076	.581	.563	.553	1.808
	DPR	1.963	.588	.371	3.338	.001	.765	1.307
	SIZE	-.078	.143	-.069	-.549	.585	.603	1.657

a. Dependent Variable: PBV



Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.621 ^a	.386	.348	1.09166	1.611

a. Predictors: (Constant), SIZE, DPR, PER, DER

b. Dependent Variable: PBV

Runs Test

	Unstandardized Residual
Test Value ^a	-.22812
Cases < Test Value	35
Cases >= Test Value	35
Total Cases	70
Number of Runs	31
Z	-1.204
Asymp. Sig. (2-tailed)	.229

a. Median

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.750	4.372		.629	.531
	PER	.059	.016	.398	3.801	.000
	DER	.081	.140	.076	.581	.563
	DPR	1.963	.588	.371	3.338	.001
	SIZE	-.078	.143	-.069	-.549	.585

a. Dependent Variable: PBV

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.604	4	12.151	10.196	.000 ^b
	Residual	77.462	65	1.192		
	Total	126.066	69			

a. Dependent Variable: PBV

b. Predictors: (Constant), SIZE, DPR, PER, DER

Lampiran 16

Tabel Durbin-Watson (DW), $\alpha = 5\%$

n	k=1		k=2		k=3		k=4		k=5	
	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU
36	1.4107	1.5245	1.3537	1.5872	1.2953	1.6539	1.2358	1.7245	1.1755	1.7987
37	1.4190	1.5297	1.3635	1.5904	1.3068	1.6550	1.2489	1.7233	1.1901	1.7950
38	1.4270	1.5348	1.3730	1.5937	1.3177	1.6563	1.2614	1.7223	1.2042	1.7916
39	1.4347	1.5396	1.3821	1.5969	1.3283	1.6575	1.2734	1.7215	1.2176	1.7886
40	1.4421	1.5444	1.3908	1.6000	1.3384	1.6589	1.2848	1.7209	1.2305	1.7859
41	1.4493	1.5490	1.3992	1.6031	1.3480	1.6603	1.2958	1.7205	1.2428	1.7835
42	1.4562	1.5534	1.4073	1.6061	1.3573	1.6617	1.3064	1.7202	1.2546	1.7814
43	1.4628	1.5577	1.4151	1.6091	1.3663	1.6632	1.3166	1.7200	1.2660	1.7794
44	1.4692	1.5619	1.4226	1.6120	1.3749	1.6647	1.3263	1.7200	1.2769	1.7777
45	1.4754	1.5660	1.4298	1.6148	1.3832	1.6662	1.3357	1.7200	1.2874	1.7762
46	1.4814	1.5700	1.4368	1.6176	1.3912	1.6677	1.3448	1.7201	1.2976	1.7748
47	1.4872	1.5739	1.4435	1.6204	1.3989	1.6692	1.3535	1.7203	1.3073	1.7736
48	1.4928	1.5776	1.4500	1.6231	1.4064	1.6708	1.3619	1.7206	1.3167	1.7725
49	1.4982	1.5813	1.4564	1.6257	1.4136	1.6723	1.3701	1.7210	1.3258	1.7716
50	1.5035	1.5849	1.4625	1.6283	1.4206	1.6739	1.3779	1.7214	1.3346	1.7708
51	1.5086	1.5884	1.4684	1.6309	1.4273	1.6754	1.3855	1.7218	1.3431	1.7701
52	1.5135	1.5917	1.4741	1.6334	1.4339	1.6769	1.3929	1.7223	1.3512	1.7694
53	1.5183	1.5951	1.4797	1.6359	1.4402	1.6785	1.4000	1.7228	1.3592	1.7689
54	1.5230	1.5983	1.4851	1.6383	1.4464	1.6800	1.4069	1.7234	1.3669	1.7684
55	1.5276	1.6014	1.4903	1.6406	1.4523	1.6815	1.4136	1.7240	1.3743	1.7681
56	1.5320	1.6045	1.4954	1.6430	1.4581	1.6830	1.4201	1.7246	1.3815	1.7678
57	1.5363	1.6075	1.5004	1.6452	1.4637	1.6845	1.4264	1.7253	1.3885	1.7675
58	1.5405	1.6105	1.5052	1.6475	1.4692	1.6860	1.4325	1.7259	1.3953	1.7673
59	1.5446	1.6134	1.5099	1.6497	1.4745	1.6875	1.4385	1.7266	1.4019	1.7672
60	1.5485	1.6162	1.5144	1.6518	1.4797	1.6889	1.4443	1.7274	1.4083	1.7671
61	1.5524	1.6189	1.5189	1.6540	1.4847	1.6904	1.4499	1.7281	1.4146	1.7671
62	1.5562	1.6216	1.5232	1.6561	1.4896	1.6918	1.4554	1.7288	1.4206	1.7671
63	1.5599	1.6243	1.5274	1.6581	1.4943	1.6932	1.4607	1.7296	1.4265	1.7671
64	1.5635	1.6268	1.5315	1.6601	1.4990	1.6946	1.4659	1.7303	1.4322	1.7672
65	1.5670	1.6294	1.5355	1.6621	1.5035	1.6960	1.4709	1.7311	1.4378	1.7673
66	1.5704	1.6318	1.5395	1.6640	1.5079	1.6974	1.4758	1.7319	1.4433	1.7675
67	1.5738	1.6343	1.5433	1.6660	1.5122	1.6988	1.4806	1.7327	1.4486	1.7676
68	1.5771	1.6367	1.5470	1.6678	1.5164	1.7001	1.4853	1.7335	1.4537	1.7678
69	1.5803	1.6390	1.5507	1.6697	1.5205	1.7015	1.4899	1.7343	1.4588	1.7680
70	1.5834	1.6413	1.5542	1.6715	1.5245	1.7028	1.4943	1.7351	1.4637	1.7683

Lampiran 17

Tabel t dengan signifikansi 5%

Pr df	0.25 0.50	0.10 0.20	0.05 0.10	0.025 0.050	0.01 0.02	0.005 0.010	0.001 0.002
41	0.68052	1.30254	1.68288	2.01954	2.42080	2.70118	3.30127
42	0.68038	1.30204	1.68195	2.01808	2.41847	2.69807	3.29595
43	0.68024	1.30155	1.68107	2.01669	2.41625	2.69510	3.29089
44	0.68011	1.30109	1.68023	2.01537	2.41413	2.69228	3.28607
45	0.67998	1.30065	1.67943	2.01410	2.41212	2.68959	3.28148
46	0.67986	1.30023	1.67866	2.01290	2.41019	2.68701	3.27710
47	0.67975	1.29982	1.67793	2.01174	2.40835	2.68456	3.27291
48	0.67964	1.29944	1.67722	2.01063	2.40658	2.68220	3.26891
49	0.67953	1.29907	1.67655	2.00958	2.40489	2.67995	3.26508
50	0.67943	1.29871	1.67591	2.00856	2.40327	2.67779	3.26141
51	0.67933	1.29837	1.67528	2.00758	2.40172	2.67572	3.25789
52	0.67924	1.29805	1.67469	2.00665	2.40022	2.67373	3.25451
53	0.67915	1.29773	1.67412	2.00575	2.39879	2.67182	3.25127
54	0.67906	1.29743	1.67356	2.00488	2.39741	2.66998	3.24815
55	0.67898	1.29713	1.67303	2.00404	2.39608	2.66822	3.24515
56	0.67890	1.29685	1.67252	2.00324	2.39480	2.66651	3.24226
57	0.67882	1.29658	1.67203	2.00247	2.39357	2.66487	3.23948
58	0.67874	1.29632	1.67155	2.00172	2.39238	2.66329	3.23680
59	0.67867	1.29607	1.67109	2.00100	2.39123	2.66176	3.23421
60	0.67860	1.29582	1.67065	2.00030	2.39012	2.66028	3.23171
61	0.67853	1.29558	1.67022	1.99962	2.38905	2.65886	3.22930
62	0.67847	1.29536	1.66980	1.99897	2.38801	2.65748	3.22696
63	0.67840	1.29513	1.66940	1.99834	2.38701	2.65615	3.22471
64	0.67834	1.29492	1.66901	1.99773	2.38604	2.65485	3.22253
65	0.67828	1.29471	1.66864	1.99714	2.38510	2.65360	3.22041
66	0.67823	1.29451	1.66827	1.99656	2.38419	2.65239	3.21837
67	0.67817	1.29432	1.66792	1.99601	2.38330	2.65122	3.21639
68	0.67811	1.29413	1.66757	1.99547	2.38245	2.65008	3.21446
69	0.67806	1.29394	1.66724	1.99495	2.38161	2.64898	3.21260
70	0.67801	1.29376	1.66691	1.99444	2.38081	2.64790	3.21079
71	0.67796	1.29359	1.66660	1.99394	2.38002	2.64686	3.20903
72	0.67791	1.29342	1.66629	1.99346	2.37926	2.64585	3.20733
73	0.67787	1.29326	1.66600	1.99300	2.37852	2.64487	3.20567
74	0.67782	1.29310	1.66571	1.99254	2.37780	2.64391	3.20406
75	0.67778	1.29294	1.66543	1.99210	2.37710	2.64298	3.20249
76	0.67773	1.29279	1.66515	1.99167	2.37642	2.64208	3.20096
77	0.67769	1.29264	1.66488	1.99125	2.37576	2.64120	3.19948
78	0.67765	1.29250	1.66462	1.99085	2.37511	2.64034	3.19804
79	0.67761	1.29236	1.66437	1.99045	2.37448	2.63950	3.19663
80	0.67757	1.29222	1.66412	1.99006	2.37387	2.63869	3.19526

Lampiran 18

Titik Persentase Distribusi F untuk Probabilita = 0,05

df untuk penyebut (N2)	df untuk pembilang (N1)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
46	4.05	3.20	2.81	2.57	2.42	2.30	2.22	2.15	2.09	2.04	2.00	1.97	1.94	1.91	1.89
47	4.05	3.20	2.80	2.57	2.41	2.30	2.21	2.14	2.09	2.04	2.00	1.96	1.93	1.91	1.88
48	4.04	3.19	2.80	2.57	2.41	2.29	2.21	2.14	2.08	2.03	1.99	1.96	1.93	1.90	1.88
49	4.04	3.19	2.79	2.56	2.40	2.29	2.20	2.13	2.08	2.03	1.99	1.96	1.93	1.90	1.88
50	4.03	3.18	2.79	2.56	2.40	2.29	2.20	2.13	2.07	2.03	1.99	1.95	1.92	1.89	1.87
51	4.03	3.18	2.79	2.55	2.40	2.28	2.20	2.13	2.07	2.02	1.98	1.95	1.92	1.89	1.87
52	4.03	3.18	2.78	2.55	2.39	2.28	2.19	2.12	2.07	2.02	1.98	1.94	1.91	1.89	1.86
53	4.02	3.17	2.78	2.55	2.39	2.28	2.19	2.12	2.06	2.01	1.97	1.94	1.91	1.88	1.86
54	4.02	3.17	2.78	2.54	2.39	2.27	2.18	2.12	2.06	2.01	1.97	1.94	1.91	1.88	1.86
55	4.02	3.16	2.77	2.54	2.38	2.27	2.18	2.11	2.06	2.01	1.97	1.93	1.90	1.88	1.85
56	4.01	3.16	2.77	2.54	2.38	2.27	2.18	2.11	2.05	2.00	1.96	1.93	1.90	1.87	1.85
57	4.01	3.16	2.77	2.53	2.38	2.26	2.18	2.11	2.05	2.00	1.96	1.93	1.90	1.87	1.85
58	4.01	3.16	2.76	2.53	2.37	2.26	2.17	2.10	2.05	2.00	1.96	1.92	1.89	1.87	1.84
59	4.00	3.15	2.76	2.53	2.37	2.26	2.17	2.10	2.04	2.00	1.96	1.92	1.89	1.86	1.84
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04	1.99	1.95	1.92	1.89	1.86	1.84
61	4.00	3.15	2.76	2.52	2.37	2.25	2.16	2.09	2.04	1.99	1.95	1.91	1.88	1.86	1.83
62	4.00	3.15	2.75	2.52	2.36	2.25	2.16	2.09	2.03	1.99	1.95	1.91	1.88	1.85	1.83
63	3.99	3.14	2.75	2.52	2.36	2.25	2.16	2.09	2.03	1.98	1.94	1.91	1.88	1.85	1.83
64	3.99	3.14	2.75	2.52	2.36	2.24	2.16	2.09	2.03	1.98	1.94	1.91	1.88	1.85	1.83
65	3.99	3.14	2.75	2.51	2.36	2.24	2.15	2.08	2.03	1.98	1.94	1.90	1.87	1.85	1.82
66	3.99	3.14	2.74	2.51	2.35	2.24	2.15	2.08	2.03	1.98	1.94	1.90	1.87	1.84	1.82
67	3.98	3.13	2.74	2.51	2.35	2.24	2.15	2.08	2.02	1.98	1.93	1.90	1.87	1.84	1.82
68	3.98	3.13	2.74	2.51	2.35	2.24	2.15	2.08	2.02	1.97	1.93	1.90	1.87	1.84	1.82
69	3.98	3.13	2.74	2.50	2.35	2.23	2.15	2.08	2.02	1.97	1.93	1.90	1.86	1.84	1.81
70	3.98	3.13	2.74	2.50	2.35	2.23	2.14	2.07	2.02	1.97	1.93	1.89	1.86	1.84	1.81
71	3.98	3.13	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.97	1.93	1.89	1.86	1.83	1.81
72	3.97	3.12	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.96	1.92	1.89	1.86	1.83	1.81
73	3.97	3.12	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.96	1.92	1.89	1.86	1.83	1.81
74	3.97	3.12	2.73	2.50	2.34	2.22	2.14	2.07	2.01	1.96	1.92	1.89	1.85	1.83	1.80
75	3.97	3.12	2.73	2.49	2.34	2.22	2.13	2.06	2.01	1.96	1.92	1.88	1.85	1.83	1.80
76	3.97	3.12	2.72	2.49	2.33	2.22	2.13	2.06	2.01	1.96	1.92	1.88	1.85	1.82	1.80
77	3.97	3.12	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.96	1.92	1.88	1.85	1.82	1.80
78	3.96	3.11	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.95	1.91	1.88	1.85	1.82	1.80
79	3.96	3.11	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.95	1.91	1.88	1.85	1.82	1.79
80	3.96	3.11	2.72	2.49	2.33	2.21	2.13	2.06	2.00	1.95	1.91	1.88	1.84	1.82	1.79
81	3.96	3.11	2.72	2.48	2.33	2.21	2.12	2.05	2.00	1.95	1.91	1.87	1.84	1.82	1.79
82	3.96	3.11	2.72	2.48	2.33	2.21	2.12	2.05	2.00	1.95	1.91	1.87	1.84	1.81	1.79
83	3.96	3.11	2.71	2.48	2.32	2.21	2.12	2.05	1.99	1.95	1.91	1.87	1.84	1.81	1.79
84	3.95	3.11	2.71	2.48	2.32	2.21	2.12	2.05	1.99	1.95	1.90	1.87	1.84	1.81	1.79
85	3.95	3.10	2.71	2.48	2.32	2.21	2.12	2.05	1.99	1.94	1.90	1.87	1.84	1.81	1.79
86	3.95	3.10	2.71	2.48	2.32	2.21	2.12	2.05	1.99	1.94	1.90	1.87	1.84	1.81	1.78
87	3.95	3.10	2.71	2.48	2.32	2.20	2.12	2.05	1.99	1.94	1.90	1.87	1.83	1.81	1.78
88	3.95	3.10	2.71	2.48	2.32	2.20	2.12	2.05	1.99	1.94	1.90	1.86	1.83	1.81	1.78

