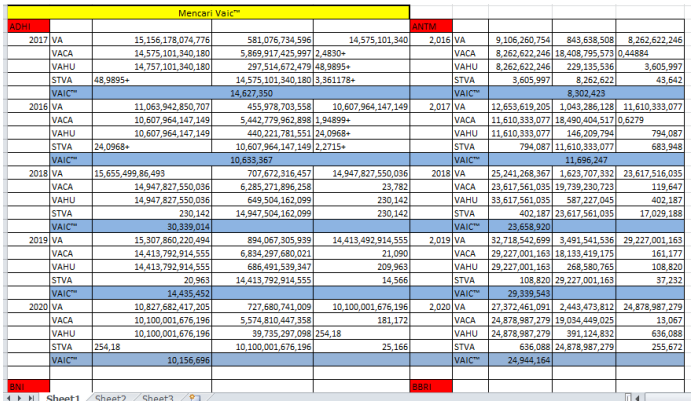
LAMPIRAN

ROA

Kode	Tahun						Rata-Rata
	2015	2016	2017	2018	2019	2020	
ADHI	2.76	2.12	0.79	2.53	2.63	1.57	2.07
ANTM	0.39	0.8	1.59	9.19	2.24	12.68	4.48
PTBA	14.6	13	26.82	25.74	19.21	10.4	18.30
SMBR	10	5.93	2.89	1.37	0.53	0.19	3.49
PGAS	2.54	4.61	3.09	4.24	1.76	-2.8	2.24
GIAA	2.27	0.21	-5.74	0.018	0.15	-23.9	-4.50
INAF	0.42	-1.25	-3.02	-2.26	0.57	1.75	-0.63
JSMR	3.99	3.53	2.77	2.67	2.21	0.48	2.61
KAEF	7.2	5.88	5.36	4.39	0.09	0.11	3.84
KRAS	0.48	0.24	-1.98	-4.67	-15.31	0.67	-3.43
PTPP	3.86	3.65	4.12	4.46	2.31	0.81	3.20
SMGR	10.22	11.84	3.92	6.27	2.99	3.56	6.47
TLKM	9.32	10.77	11.15	8.74	8.43	8.42	9.47
TINS	1.09	2.63	4.23	3.51	3	0.12	2.43
WIKA	3.18	3.37	2.63	2.92	3.67	0.28	2.68
WSKT	3.46	2.78	3.96	3.18	0.76	-6.98	1.19
BBNI	1.92	2.02	2.08	2.02	1.98	0.4	1.74
BBRI	2.89	2.61	2.57	2.65	2.4	1.21	2.39
BBTN	1.07	1.47	1.15	0.91	0.07	0.44	0.85
BMRI	2.36	1.41	1.31	1.51	0.62	0.7	1.32



Mencari VaiC™				
ADHI				
2017	VA	15,156,178,074,776	581,076,734,596	14,575,101,340
	VACA	14,575,101,340,180	5,869,917,425,997	2,4830+
	VAHU	14,757,101,340,180	297,514,672,479	48,9895+
	STVA	48,9895+	14,575,101,340,180	3,361178+
	VAIC™	14,627,350		
2016	VA	11,063,942,850,707	455,978,703,558	10,607,964,147,149
	VACA	10,607,964,147,149	5,442,779,962,898	1,94899+
	VAHU	10,607,964,147,149	440,221,781,551	24,0968+
	STVA	24,0968+	10,607,964,147,149	2,2715+
	VAIC™	10,633,367		
2018	VA	15,655,499,86,493	707,672,316,457	14,947,827,550,036
	VACA	14,947,827,550,036	6,285,271,896,258	23,782
	VAHU	14,947,827,550,036	649,504,162,099	230,142
	STVA	230,142	14,947,504,162,099	230,142
	VAIC™	30,339,014		
2019	VA	15,307,860,220,494	894,067,305,939	14,413,492,914,555
	VACA	14,413,792,914,555	6,834,297,680,021	21,090
	VAHU	14,413,792,914,555	686,491,539,347	209,963
	STVA	20,963	14,413,792,914,555	14,566
	VAIC™	14,435,452		
2020	VA	10,827,682,417,205	727,680,741,009	10,100,001,676,196
	VACA	10,100,001,676,196	5,574,810,447,358	181,172
	VAHU	10,100,001,676,196	39,735,297,098	254,18
	STVA	254,18	10,100,001,676,196	25,166
	VAIC™	10,156,696		
BNI				

ANTM				
2,016	VA	9,106,260,754	843,638,508	8,262,622,246
	VACA	8,262,622,246	18,408,795,573	0,44884
	VAHU	8,262,622,246	229,135,536	3,605,997
	STVA	3,605,997	8,262,622	43,642
	VAIC™	8,302,423		
2,017	VA	12,653,619,205	1,043,286,128	11,610,333,077
	VACA	11,610,333,077	18,490,404,517	0,6279
	VAHU	11,610,333,077	146,209,794	794,087
	STVA	794,087	11,610,333,077	683,948
	VAIC™	11,696,247		
2018	VA	25,241,268,367	1,623,707,332	23,617,516,035
	VACA	23,617,561,035	19,739,230,723	119,647
	VAHU	33,617,561,035	587,227,045	402,187
	STVA	402,187	23,617,561,035	17,029,188
	VAIC™	23,658,920		
2,019	VA	32,718,542,699	3,491,541,536	29,227,001,163
	VACA	29,227,001,163	18,133,419,175	161,177
	VAHU	29,227,001,163	268,580,765	108,820
	STVA	108,820	29,227,001,163	37,232
	VAIC™	29,339,543		
2,020	VA	27,372,461,091	2,443,473,812	24,878,987,279
	VACA	24,878,987,279	19,034,449,025	13,067
	VAHU	24,878,987,279	391,124,832	636,088
	STVA	636,088	24,878,987,279	255,672
	VAIC™	24,944,164		
BBRI				

Sheet1 Sheet2 Sheet3

BNI					ASRI				
2016	VA	43,768,439	13,773,377	29,995,062	2,016	VA	94,787,989	27,211,975	67,576,024
	VACA	29,995,062	89,254,000	33,607		VACA	67,576,014	146,812,590	0,460
	VAHU	29,995,062	19,216,843	156,087		VAHU	67,576,014	37,098,320	182,153
	STVA	156,087	29,995,062	520,376		STVA	182,153	67,576,014	26,955
	VAIC™	30,001,763				VAIC™	67,580,786		
2017	VA	48,177,849	16,240,086	31,937,763	2,017	VA	102,912,375	29,894,281	73,018,094
	VACA	31,937,763	100,903,304	0,31651		VACA	73,018,094	168,007,778	0,434
	VAHU	31,937,763	20,396,392	15,658		VAHU	73,018,094	38,614,075	1,890
	STVA	15,658	31,937,763	49,028		STVA	1,890	73,018,094	2,589
	VAIC™	31,943,468				VAIC™	73,022,773		
2018	VA	54,138,613	18,692,298	72,830,911	2,018	VA	111,582,804	33,917,032	77,665,722
	VACA	72,830,911	110,373,789	0,6598		VACA	77,665,772	185,275,331	0,419
	VAHU	72,830,911	21,782,961	33,434		VAHU	77,665,772	141,990,284	0,54697
	STVA	33,434	72,830,911	460,641		STVA	0,54697	77,665,772	7,042
	VAIC™	72,837,949				VAIC™	77,678,779		
2019	VA	54,495,996	21,929,999	32,565,997	2,019	VA	121,756,276	40,048,971	81,707,305
	VACA	32,565,997	125,003,948	0,26051		VACA	81,707,305	208,784,336	0,391
	VAHU	32,565,997	23,686,899	1,337,485		VAHU	81,707,305	44,965,625	181,710
	STVA	137,485	32,565,997	133,485		STVA	181,710	81,707,305	2,223
	VAIC™	32,570,594				VAIC™	81,709,529		
2020	VA	52,144,058	19,020,905	33,123,153	2,020	VA	116,932,512	37,722,595	79,209,917
	VACA	33,123,153	112,872,199	0,29345		VACA	79,209,917	199,911,376	0,396,225,160
	VAHU	33,123,153	24,213,756	13,679		VAHU	79,209,917	49,931,359	1.586,376,148
	STVA	13,679	33,123,153	41,297		STVA	1,586	27,209,917	5,830
	VAIC™	33,128,487				VAIC™	792,099,924		

BBTN					BMRI				
2016	VA	17,138,819	8,975,274	8,163,545	2016	VA	18,307,758	5,976,464	12,331,294
	VACA	8,163,545	19,130,536	0,426		VACA	12,331,294	118,047,258	0,104
	VAHU	8,163,545	5,386,604	1,515,52		VAHU	12,331,294	7,572,387	1,628
	STVA	1,515,52	8,163,545	1,856		STVA	1,628	12,331,294	1,320
	VAIC™	8,166,371				VAIC™	12,333,054		
2017	VA	4,383,309	2,391,329	11,991,980	2017	VA	59,308,417	20,469,365	38,839,052
	VACA	1,991,980	21,663,434	0,091		VACA	38,839,052	170,006,132	0,228
	VAHU	1,991,980	1,451,451	13,724		VAHU	38,899,052	25,310,464	1,534
	STVA	13,724	1,991,980	6,889		STVA	1,534	38,839,052	3,950
	VAIC™	2,011,613				VAIC™	38,844,536		
2018	VA	5,065,257	2,733,545	2,331,712	2018	VA	59,555,127	19,082,541	40,472,586
	VACA	2,331,712	21,717,345	0,107		VACA	40,472,586	176,277,019	0,229
	VAHU	2,331,712	1,708,882	1,364,466		VAHU	40,472,586	26,906,824	1,504
	STVA	1,364	2,331,712	5,851		STVA	1,504	40,472,586	3,716
	VAIC™	2,338,934				VAIC™	40,477,806		
2019	VA	25,678,368	16,600,365	9,078,003	2019	VA	22,016,188	7,634,662	14,381,526
	VACA	9,078,003	23,836,195	0,380,849		VACA	14,381,526	209,034,525	0,068
	VAHU	9,078,003	4,191,482	2,165,821		VAHU	14,381,526	8,853,630	1,624
	STVA	2,165,821	9,078,003	2,385		STVA	1,624	14,381,526	1,129
	VAIC™	9,082,553				VAIC™	14,383,279		
2020	VA	25,166,585	16,044,791	9,121,794	2020	VA	23,709,474	8,173,104	15,536,370
	VACA	9,121,794	19,987,845	0,456,367		VACA	15,536,370	177,441,641	0,087
	VAHU	9,121,794	4,173,020	2,185,897		VAHU	15,536,370	10,028,698	1,549
	STVA	2,185	9,121,794	2,396		STVA	1,549	15,536,370	9,971
	VAIC™	9,126,374				VAIC™	15,547,890		

GIAA					TNAF				
2016	VA	3,863,921,565	31,110,017	3,832,811,548	2016	VA	1,674,702	1,337,793	336,909
	VACA	3,832,811,548	1,009,897,219	3,795		VACA	336,909	575,757	0,585
	VAHU	3,832,811,548	8,425,842	454,887		VAHU	336,909	1,553	216,809
	STVA	454,887	3,832,811,548	1,186		STVA	216,809	336,909	6,435
	VAIC™	3,833,267,621				VAIC™	336,909		
2017	VA	4,177,325,781	15,733,627	4,162,192,154	2017	VA	1,631,317	1,348,504	282,813
	VACA	4,162,192,154	937,469,200	4,439		VACA	282,813	526,409	0,537
	VAHU	4,162,192,154	55,209,041	75,389		VAHU	282,813	1,020,807	277,048
	STVA	15,389	4,162,192,154	1,811		STVA	277,048	282,813	9,796
	VAIC™	4,162,269,354				VAIC™	282,813		
2018	VA	4,330,441,061	4,593,782,601	-263,341,540	2018	VA	1,592,979	1,308,760	284,219
	VACA	-263,341,540	639,806,556	-411		VACA	284,219	496,646	0,572
	VAHU	-263,341,540	57,503,925	-4,579		VAHU	284,219	991,148	286,758
	STVA	-4,579	-263,341,925	1,739		STVA	286,758	284,719	1,007
	VAIC™	-263,344,398				VAIC™	284,220		
2019	VA	4,572,638,038	4,409,191,269	163,446,769	2019	VA	1,399,175	1,108,815	290,360
	VACA	163,446,769	720,622,891	0,226		VACA	290,360	504,935	0,575
	VAHU	163,446,769	4,802,668	34,032		VAHU	290,360	2,978	97,498
	STVA	34,032	163,446,769	2,082		STVA	97,498	290,360	3,357
	VAIC™	163,482,883				VAIC™	290,360		
2020	VA	1,492,331,099	4,572,638,083	-3,080,306,984	2020	VA	1,715,587	1,314,987	400,599
	VACA	-3,080,306,984	1,943,024,247	-1,585		VACA	400,599	430,326	0,930
	VAHU	-3,080,306,984	115,950,186	-26,565		VAHU	400,599	25,958	15,432
	STVA	26,565	-3,080,306,984	8,625		STVA	15,432	400,599	3,852
	VAIC™	-3,080,324,925				VAIC™	400,599		
ISMR					KAEF				
2016	VA	16,661,402	11,805,011	4,846,391	2016	VA	5,811,502,656	3,947,606,932	1,863,895,723

Sheet1 Sheet2 Sheet3

1	ISMR					KAEF			
2	2016	VA	16,661,402	11,805,011	4,846,391	2016	VA	5,811,502,656	3,947,606,932	1,863,895,723
3		VACA	4,856,391	16,338,840	0,297		VACA	1,863,895,723	2,271,407,409	0,820,540
4		VAHU	4,856,391	846,624	5,736		VAHU	1,863,895,723	59,798,179	31,169,723
5		STVA	5,736	4,856,391	1,181		STVA	31,169,773	1,863,895,723	1,672
6		VAIC™	4,856,398				VAIC™	1,863,895,757		
7	2017	VA	36,029,196	29,784,309	5,307,886	2017	VA	6,127,497,369	3,925,599,724	2,201,879,645
8		VACA	5,307,886	18,359,439	0,289		VACA	2,201,879,645	2,572,520,755	0,855,922
9		VAHU	5,307,886	1,156,796	4,588		VAHU	2,201,879,645	38,293,826	57,499,599
0		STVA	4,588	5,307,886	8,644		STVA	57,499,599	2,201,879,645	2,611
1		VAIC™	5,307,900				VAIC™	2,201,879,705		
2	2018	VA	36,974,074	31,056,564	5,917,509	2018	VA	7,454,144,741	4,673,936,445	2,780,178,295
3		VACA	5,917,509	20,198,985	0,292		VACA	2,780,178,295	3,356,459,729	0,823,306
4		VAHU	5,917,509	1,173,815	4,041		VAHU	2,780,178,295	2,736,433,729	1,015,985
5		STVA	5,041	5,917,509	8,519		STVA	1,015,985	2,780,178,295	3,654,390
6		VAIC™	5,917,523				VAIC™	2,780,178,299		
7	2019	VA	26,345,260	19,900,617	6,444,643	2019	VA	9,400,535	5,897,247	3,503,287
8		VACA	6,444,643	23,185,715	0,227		VACA	3,305,287	7,412,926	0,472,591
9		VAHU	6,444,643	1,023,715	6,695		VAHU	3,503,287	497,969	7,035,143
0		STVA	6,697	6,444,643	9,768		STVA	7,035	3,503,287	2,008
1		VAIC™	6,461,106				VAIC™	3,503,296		
2	2020	VA	13,704,021	8,349,488	5,354,533	2020	VA	10,006,173	6,349,041	3,657,131
3		VACA	5,354,533	24,775,615	0,216		VACA	3,657,131	7,105,672	0,415
4		VAHU	5,354,533	738,080	7,254		VAHU	3,657,131	596,377	6,132
5		STVA	7,254	5,354,533	1,354		STVA	6,132	3,657,131	1,676
6		VAIC™	5,363,141				VAIC™	3,657,138		
7	KRAS					PGAS			
8	2016	VA	1,344,715	1,189,489	155,226	2016	VA	720,391,879	496,840,397	223,551,482
9		VACA	155,226	1,839,677	0,084		VACA	223,551,482	3,132,236,001	0,071

	VAIC™	5,363,141				VAIC™	3,657,138		
KRAS					PGAS				
2016	VA	1,344,715	1,189,489	155,226	2016	VA	720,391,879	496,840,397	223,551,482
	VACA	155,226	1,839,677	0,084		VACA	223,551,482	3,132,236,001	0,071
	VAHU	155,226	30,376	5,110		VAHU	223,551,482	133,202,118	1,678
	STVA	5,110	155,226	3,292		STVA	1,678	223,551,482	7,507
	VAIC™	163,628				VAIC™	223,568,667		
2017	VA	1,039,914	883,991	155,923	2017	VA	3,579,597,761	2,389,088,310	1,190,507,451
	VACA	155,923	1,852,809	0,084		VACA	1,190,507,451	4,310,413,612	0,276
	VAHU	155,923	81,611	1,910		VAHU	1,190,507,451	164,652,154	7,230
	STVA	1,190	155,923	1,225		STVA	7,230	1,190,507,451	6,073
	VAIC™	159,058				VAIC™	1,190,520,754		
2018	VA	1,276,096	1,161,919	114,177	2018	VA	3,870,266,738	2,560,766,539	1,309,500,199
	VACA	114,177	1,678,253	0,068		VACA	1,309,500,199	3,201,890,711	0,408
	VAHU	114,177	36,909	3,093		VAHU	1,309,500,199	220,265,625	5,945
	STVA	3,093	114,177	2,709		STVA	5,945	220,265,625	5,539
	VAIC™	119,979				VAIC™	1,309,511,683		
2019	VA	418,983	407,235	11,748	2019	VA	860,532,732	5,757,345,724	285,187,008
	VACA	11,748	11,760,674	0,006		VACA	285,187,008	3,294,548,755	0,086
	VAHU	11,748	7,902	1,486		VAHU	285,187,008	117,812,024	2,420
	STVA	1,486	11,748	0,216		STVA	2,240	285,187,008	8,488
	VAIC™	13,360				VAIC™	285,197,916		
2020	VA	311,188	257,085	54,103	2020	VA	1,469,167,459	1,006,615,115	462,552,344
	VACA	54,103	448,723	0,120		VACA	462,552,344	2,955,438,855	0,156
	VAHU	54,103	91,765	0,589		VAHU	462,552,344	33,719,223	13,717
	STVA	0,589	54,103	1,089		STVA	13,717	462,552,344	2,965
	VAIC™	55,781				VAIC™	462,596,,026		
PTBA					PTPP				
2016	VA	14,058,869	9,657,400	4,401,469	2016	VA	16,458,884,219	14,003,354,538	2,455,529,681
	VACA	4,401,469	10,552,405	0,417		VACA	2,455,529,681	10,796,157,507	0,227

	VAIC™	55,781				VAIC™	462,596,,026		
PTBA					PTPP				
2016	VA	14,058,869	9,657,400	4,401,469	2016	VA	16,458,884,219	14,003,354,538	2,455,529,681
	VACA	4,401,469	10,552,405	0,417		VACA	2,455,529,681	10,796,157,507	0,227

	VAHU	4,401,469	2,696,916	1,632		VAHU	2,455,529,681	487,330,340	5,038
	STVA	1,632	4,401,469	3,707		STVA	5,038	2,455,529,681	2,051
	VAIC™	4,406,808				VAIC™	2,455,529,688		
2017	VA	19,471,030	10,964,524	8,506,506	2017	VA	21,503,359,604	18,250,798,096	3,251,461,507
	VACA	8,506,506	13,799,985	0,616		VACA	3,251,461,507	14,243,668	47,529
	VAHU	8,506,506	1,520,551	5,594		VAHU	3,251,461,507	68,408,668	47,529
	STVA	5,594	8,506,506	65,576		STVA	47,529	3,251,461	1,461
	VAIC™	8,518,676				VAIC™	3,251,461,556		
2018	VA	21,166,993	12,621	8,545,793	2018	VA	25,119,560,117	21,573,136,305	3,546,423,811
	VACA	8,545,793	16,269,696	0,525		VACA	3,546,423,811	16,315,611,975	0,217
	VAHU	8,545,793	1,677,944	5,093		VAHU	3,546,423,811	44,097,678	80,422
	STVA	5,093	8,545,793	5,959		STVA	80,422	3,546,421,811	
	VAIC™	8,556,845				VAIC™	3,546,423,894		
2019	VA	21,787,564	14,176,060	7,611,504	2019	VA	4,947,752,127	4,309,694,926	638,057,201
	VACA	7,611,504	18,422,826	0,413		VACA	638,057,201	15,420,693	0,041
	VAHU	7,611,504	1,414,768	5,380		VAHU	638,057,201	2,451,469	260,275
	STVA	5,380	7,611,504	7,068		STVA	260,275	638,057,201	4,079
	VAIC™	7,623,952				VAIC™	638,057,465		
2020	VA	17,325,192	12,758,932	4,566,260	2020	VA	3,409,470,614	3,080,892,299	328,578,315
	VACA	4,566,260	16,939,196	0,269		VACA	328,578,315	14,164,047,880	0,023
	VAHU	4,566,260	823,758	5,543		VAHU	328,578,315	3,261,296	100,750
	STVA	5,543	4,566,260	1,213		STVA	100,750	328,578,315	3,066
	VAIC™	4,573,260				VAIC™	378,578,419		
SMBR					SMGR				
2016	VA	1,522,808	1,011,809	518,998	2016	VA	26,134,306	16,278,433	9,855,872
	VACA	518,998	3,120,757	0,166		VACA	9,855,872	30,574,391	0,322

SMBR					SMGR				
2016	VA	1,522,808	1,011,809	518,998	2016	VA	26,134,306	16,278,433	9,855,872
	VACA	518,998	3,120,757	0,166		VACA	9,855,872	30,574,391	0,322

	VAHU	518,998	90,190	5,754		VAHU	9,855,872	5,084,621	1,938
	STVA	5,754	518,998	1,108		STVA	1,938	9,855,872	1,966
	VAIC™	519,005				VAIC™	9,855,876		
2017	VA	1,551,524	1,078,706	472,818	2017	VA	27,813,664	19,854,065	7,959,598
	VACA	472,818	3,412,859	0,138		VACA	7,959,598	30,046,032	0,264
	VAHU	472,818	62,298	7,589		VAHU	7,959,598	603,887	13,180
	STVA	7,589	472,818	1,605		STVA	13,180	7,959,598	1,655
	VAIC™	472,827				VAIC™	9,959,613		
2018	VA	1,995,807	1,289,162	706,644	2018	VA	30,687,625	21,357,095	9,330,530
	VACA	706,644	3,473,671	0,203		VACA	9,330,530	32,736,295	0,285
	VAHU	706,644	69,281	10,199		VAHU	9,330,530	1,019,255	9,154
	STVA	10,199	706,644	1,443		STVA	9,154	9,330,530	9,811
	VAIC™	706,656				VAIC™	9,330,549		
2019	VA	1,999,516	1,995,807	874,888	2019	VA	16,351	11,686	4,664
	VACA	874,888	3,482,293	0,251		VACA	4,664	33,891	0,137
	VAHU	874,888	56,498	15,485		VAHU	4,664	1,326	3,517
	STVA	15,485	874,888	1,769		STVA	3,517	4,664	7,541
	VAIC™	874,906				VAIC™	7,675		
2020	VA	1,150,233	701,474	448,759	2020	VA	16,025	11,213	4,812
	VACA	448,759	3,351,699	0,133		VACA	4,812	34,370	0,140
	VAHU	448,759	17,482	25,669		VAHU	4,812	1,315	3,658
	STVA	25,669	448,759	1,769		STVA	3,658	4,081	7,601
	VAIC™	448,790				VAIC™	4,823		
TINS					TLKM				
2016	VA	6,968,294	5,873,406	1,094,888	2016	VA	116,333	31,263	85,070
	VACA	1,094,888	5,653,685	0,193		VACA	85,070	105,544	0,806
	VAHU	1,094,888	131,921	8,299		VAHU	85,070	38,189	2,227

	VAIC™	448,790				VAIC™	4,823		
TINS					TLKM				
2016	VA	6,968,294	5,873,406	1,094,888	2016	VA	116,333	31,263	85,070
	VACA	1,094,888	5,653,685	0,193		VACA	85,070	105,544	0,806
	VAHU	1,094,888	131,921	8,299		VAHU	85,070	38,189	2,227

	STVA	8,299	1,094,888	7,580		STVA	2,227	85,070	2,618
	VAIC™	1,110,767				VAIC™	89,915		
2017	VA	9.217,160	7,691,597	1,525,563	2017	VA	128,256	36,603	91,653
	VACA	1,525,563	6,061,493	0,251		VACA	91,653	112,130	0,817
	VAHU	1,525,563	20,729,997	7,359		VAHU	91,653	42,659	2,148
	STVA	7,357	1,537	4,823		STVA	2,148	91,653	2,344
	VAIC™	1,537				VAIC™	96,145		
2018	VA	11,049,946	9,372,416	1,677,530	2018	VA	130,784	43,791	86,993
	VACA	1,677,530	6,521,881	0,257		VACA	86,993	117,303	0,741
	VAHU	1,677,530	191,482	8,760		VAHU	86,993	36,405	2,389
	STVA	8,760	1,677,530	5,222		STVA	2,389	86,993	2,746
	VAIC™	1,691,512				VAIC™	92,128		
2019	VA	19,341,569	18,197,638	1,143,931	2019	VA	42,226	23,178	19,048
	VACA	1,143,931	5,258,405	0,217		VACA	19,048	117,250	0,162
	VAHU	1,142,931	69,441	16,473		VAHU	19,048	37,908	0,502
	STVA	16,473	1,143,931	1,440		STVA	0,502	19,048	2,637
	VAIC™	1,161,844				VAIC™	22,187		
2020	VA	15,215,980	14,096,099	1,119,881	2020	VA	136,593	28,892	107,701
	VACA	1,119,881	4,940,136	0,226		VACA	107,701	120,889	0,890
	VAHU	1,119,881	155,134	7,218		VAHU	107,701	38,775	2,777
	STVA	7,218	1,119,881	6,446		STVA	2,777	107,701	2,578
	VAIC™	1,133,545				VAIC™	113,056		
WIKA					WSKT				
2016	VA	15,668,832	13,476,892	2,191,940	2016	VA	23,788,322	19,820,484	3,967,838
	VACA	1,191,940	12,737,989	0,172		VACA	3,967,838	16,773,218	0,236

A	B	C	D	E	F	G	H	I	J
	STVA	7,218	1,119,881	6,446		STVA	2,777	107,701	2,578
	VAIC™	1,133,545				VAIC™	113,056		
WIKA					WSKT				
2016	VA	15,668,832	13,476,892	2,191,940	2016	VA	23,788,322	19,820,484	3,967,838
	VACA	1,191,940	12,737,989	0,172		VACA	3,967,838	16,773,218	0,236
	VAHU	2,191,940	84,209	26,029		VAHU	3,967,838	342,520,456	11,584
	STVA	26,029	2,191,940	1,187		STVA	11,584	3,967,383	2,919
	VAIC™	2.191,967				VAIC™	3,967,838		
2017	VA	26,176,403	23,300,168	2,876,234	2017	VA	15,578,068	12,858,395	2,719,622
	VACA	2,876,234	14,631,824	0,200		VACA	2,719,622	22,754,824	0,119
	VAHU	2,876,234	106,275	27,063		VAHU	2,719,622	162,926,675	16,692
	STVA	27,068	2,876,734	9,409		STVA	16,692	2,719,622	
	VAIC™	2,876,270				VAIC™	2,719,622		
2018	VA	31,158,193	27,553,466	3,604,727	2018	VA	22,899,801	18,171,063	4,728,737
	VACA	3,604,727	17,215,314	0,209		VACA	4,728,737	26,237,640	0,180
	VAHU	3,604,727	285,329	12,633		VAHU	4,728,737	580,224,628	8,149
	STVA	12,633	3,604,727	2,504		STVA	8,149	4,728,737	1,723
	VAIC™	3,604,743				VAIC™	4,728,737		
2019	VA	27,212,914	23,732,835	3,480,078	2019	VA	8,677,723	6,716,828	1,950,895
	VACA	3,480,078	19,215,732	0,181		VACA	1,950,895	29,118,469	0,066
	VAHU	3,480,078	168,240	20,685		VAHU	1,950,895	109,994,718	17,736
	STVA	20,685	3,480,078	5,943		STVA	17,736	1,950,895	9,091
	VAIC™	3,480,105				VAIC™	1,950,895		
2020	VA	16,536,381	15,011,596	1,524,785	2020	VA	4,169,887	3,332,972	836,914
	VACA	1,524,785	16,675,425	0,091		VACA	836,914	27,270,050	0,030
	VAHU	1.524,785	12,066,825	126,361		VAHU	836,914	15,65,742	53,450
	STVA	126,361	1,524,785	8,287		STVA	53,450	836,914	6,386
	VAIC™	1,542,920				VAIC™	836,914		

MODAL INTELEKTUAL

No.	Nama Perusahaan	Tahun	VA	VACA	VAU	STVA	VAIC™
1.	ADI	2016	10.607	1,948	24,096	2,271	14.627
		2017	14.575	2,483	2,483	3,361	10.633
		2018	14.747	2,378	23,014	1,539	30.339
		2019	14.413	2,109	20,996	1,456	14.435
		2020	10.100	1,811	254,18	2,516	10.156
2.	ANTM	2016	8.262	0,448	36.059	4.3642	8.302
		2017	11.610	0,627	79,408	6,839	11.696
		2018	23.617	1,196	40,218	1,702	23.658
		2019	29.227	1,611	108,820	3,723	29.339
		2020	24.878	1,306	63,608	2,556	24.744
3.	PTBA	2016	4.401	0,417	1,623	3,707	4.406
		2017	8.506	0,616	5,594	6,576	8.518
		2018	8.545	0,525	5,093	5,959	8.556
		2019	7.611	0,413	5,380	7,068	7.623
		2020	4.566	0,269	5,543	1,213	4.573
4.	SMBR	2016	518.998	0,166	5,754	1.108	519.005
		2017	472.818	0,138	7,589	1,605	472.827

		2018	706.644	0,203	10,199	1,443	706.656
		2019	874.888	0,251	15,485	1,769	874.706
		2020	448.759	0,133	25,669	5,720	448.790
5.	PGAS	2016	223.551	0,071	1,678	7,507	223.568
		2017	1.190.507	0,276	7,230	6,073	1.190.520
		2018	1.309.500	0,408	5,945	5,539	1.309.511
		2019	285.187	0,086	2,420	8,488	285.197
		2020	462.552	0,156	13,717	2,965	462.569
6.	GIAA	2016	3.832.811	3,795	454,887	1,186	3.833.267
		2017	4.162.192	4,439	75,389	1,811	4.162.269
		2018	-263.341	-0,411	-4,579	1,739	-263.344
		2019	163.446	0,226	34,032	2,082	163.482
		2020	-3.080.306	-1,585	26,565	8,624	-3.0808.324
7.	INAF	2016	336.909.018	0,585	216,809	6,435	336.909.241
		2017	282.813.283	0,537	277,048	9,796	282.813.570

		2018	284.219.823	0,572	286,758	1,007	284.220.111
		2019	290.360.113	0,575	97,490	3,357	290.360.214
		2020	400.599.780	0,930	15,432	3,852	400.599.800
8.	JSMR	2016	4.856.391	0,297	5,736	1,181	4.856.398
		2017	5.307.886	0,289	4,588	8,644	5.307.900
		2018	5.917.509	0,292	5,041	8,519	5.917.523
		2019	6.444	0,277	6,695	9,768	6.461
		2020	5.354	0,216	7,254	1,354	5.363
9.	KAEF	2016	1.863.895	0,820	31,169	1,672	1,863.895
		2017	2.201.879	0,855	57,499	2,611	2.201.879
		2018	2.780.178	0,823	1,015	3,654	2.780.178
		2019	3.503.287	0,472	7,035	2,008	3.503.296
		2020	3.657.131	0,514	6,132	1,676	3.657.138
10.	KRAS	2016	155.226	0,084	5,110	3,292	163.628
		2017	155.923	0,084	1,910	1,225	159.058
		2018	114.177	0,068	3,093	2,709	119.979
		2019	11.748	0,006	1,486	0,126	13.360
		2020	54.103	0,120	0,589	1,089	55.781

11.	PTPP	2016	2.455.529	0,227	5,038	2,051	2.455.529
		2017	3.251.461	0,228	47,529	1,461	3.251.461
		2018	3.546.423	0,217	80,422	2,267	3.546.423
		2019	638.057	0,041	260,275	4,079	638.051
		2020	328.578	0,023	100.750	3,066	378.578
12.	SMGR	2016	9.855.872	0,322	1,938	1,966	9.855.876
		2017	7.959.598	0,264	13,180	1,655	7.959.613
		2018	9.330.530	0,285	9,154	9,811	9.330.549
		2019	4.664.605	0,137	3,517	7,541	4.675.663
		2020	4.812.476	0,140	3,658	7,601	4.823.735
13.	TLKM	2016	85.070	0,806	2.227	2.618	89.915
		2017	91.653	0,817	2,148	2,344	96.145
		2018	86.993	0,741	2,389	2,746	92.128
		2019	19.048	0,162	0,502	2,637	22.187
		2020	107.701	0,890	2,777	2,578	113.056
14.	TINS	2016	1.094.888	0,193	8,299	7,580	1.110.767
		2017	1.525.563	0,251	7,359	4,823	1.537.745
		2018	1.677.530	0,257	8,760	5,222	1.1691.512

		2019	1.143.931	0,217	16,473	1,440	1.161.844
		2020	1.119.881	0,226	7,218	6,446	1.133.545
15.	WIKA	2016	2.191.940	0,172	26,029	1,187	2.191.967
		2017	2.876.234	0,200	27,063	9,409	2.876.270
		2018	3.604.727	0,209	12,6333	3,504	3.604.743
		2019	3.480.078	0,181	20,685	5,943	3.480.105
		2020	1.524.785	0,091	126,361	8,287	1.542.920
16.	WSKT	2016	3.967.383	0,236	11,584	2,919	3.967.838
		2017	2.719.611	0,119	16,692	6,137	2.719.622
		2018	4.728.737	0,180	8,149	1,723	4.728.737
		2019	1.950.895	0,066	17,736	9,091	1.950.895
		2020	836.914	0,030	53,450	6,386	836.914
17.	BBNI	2016	29.995	3,360	1,560	5,203	30.001
		2017	31.937	0,316	1,565	4,902	31.943
		2018	72.830	0,659	3,343	4,606	72.837
		2019	32.565	0,260	1,374	4,221	32.570
		2020	33.123	0,293	1,367	4,129	33.128
18.	BBRI	2016	67.576	0,460	1,821	2,695	67.580
		2017	73.018	0,434	1,890	2,589	73.022

		2018	77.665	0,419	0,546	7,042	77.678
		2019	81.707	0,391	1,817	2,223	81.709
		2020	79.209	0,396	1,586	5,830	79.209
19.	BBTN	2016	8.163	0,426	1,515	1,856	8.166
		2017	1.991	0,091	13,724	6,889	2.011
		2018	2.331	0,107	1,364	5,851	2,338
		2019	9.121	0,456	2,185	2,396	9.126
		2020	9.078	0,380	2,165	2,385	9,082
20	BMRI	2016	12.331	0,104	1,628	1,320	12.333
		2017	38.839	0,228	1,534	3,950	38.844
		2018	40.472	0,229	1,504	3,716	40.477
		2019	14.381	0,068	1,624	1,129	14.383
		2020	15.536	0,087	1,549	9,971	15.547

GCG

No.	Nama Perusaaan	Tahun	Dewan Direksi	Dewan Komisaris	Proporsi Komisaris Independen	Komite Audit	Kepemilikan Institusional
1.	ADI	2016	6	7	0,28	3	1,527
		2017	6	7	0,28	3	1,527
		2018	6	7	0,28	3	1,527
		2019	6	6	0,3	3	1,527
		2020	6	6	0,3	3	1,527
2.	ANTM	2016	6	6	0,3	4	1,581
		2017	6	6	0,3	3	1,581
		2018	6	5	0,4	3	1,581
		2019	6	6	0,3	4	1,581
		2020	6	6	0,3	4	1,581
3.	PTBA	2016	6	6	1,16	3	3,472
		2017	6	6	1,16	3	3,472

		2018	6	6	1,16	4	3,472
		2019	6	6	1,16	4	3,472
		2020	6	6	1,16	4	3,472
4.	SMBR	2016	5	5	0,6	3	3,049
		2017	5	5	0,2	3	3,022
		2018	5	5	0,4	3	3,014
		2019	5	5	0,4	3	3,014
		2020	4	4	0,5	3	3,014
5.	PGAS	2016	6	6	0,3	5	2,887
		2017	5	6	0,3	5	2,887
		2018	5	5	0,4	5	2,887
		2019	5	5	0,4	5	2,887
		2020	5	5	0,6	5	2,887
6.	GIAA	2016	8	7	0,28	5	1,159
		2017	9	7	0,28	5	1,159
		2018	8	9	0,44	5	1,158
		2019	7	6	0,16	6	1,158
		2020	8	6	0,16	8	1,158
7.	INAF	2016	3	3	0,3	3	3,226
		2017	3	3	0,3	2	3,226
		2018	3	3	0,3	2	3,226
		2019	3	3	0,3	2	3,226
		2020	3	3	0,6	2	3,226
8.	JSMR	2016	6	7	0,28	4	2,623
		2017	6	6	0,33	3	2,623
		2018	6	7	0,28	6	2,623
		2019	6	7	0,28	6	2,623
		2020	6	6	0,5	4	2,623
9.	KAEF	2016	5	4	0,25	5	3,601
		2017	5	5	0,2	5	3,601
		2018	5	6	0,33	4	3,601

		2019	4	5	0,4	10	3,601
		2020	4	4	0,25	10	3,601
10.	KRAS	2016	6	5	0,4	4	2,067
		2017	7	6	0,33	3	2,067
		2018	6	6	0,33	3	2,067
		2019	6	6	0,33	3	2,027
		2020	6	6	0,33	4	2,027
11.	PTPP	2016	6	6	0,33	3	3,346
		2017	6	6	0,33	3	4,032
		2018	6	6	0,33	3	4,032
		2019	6	6	0,33	3	3,951
		2020	6	6	0,33	3	3,951
12.	SMGR	2016	7	7	0,28	4	3,371
		2017	7	7	0,28	4	3,371
		2018	7	7	0,28	4	3,371
		2019	7	7	0,28	4	3,371
		2020	7	7	0,28	4	3,371
13.	TLKM	2016	5	7	0,42	6	1,022
		2017	8	7	0,42	6	2,017
		2018	8	7	0,42	5	2,017
		2019	9	6	0,5	5	1,827
		2020	9	9	0,33	7	1,827
14.	TINS	2016	4	6	0,33	5	1,342
		2017	5	5	0,4	4	1,342
		2018	5	5	0,2	4	1,342
		2019	6	5	0,4	4	1,342
		2020	6	5	0,4	4	1,342
15.	WIKA	2016	6	6	0,33	5	3,901
		2017	6	6	0,33	4	3,901
		2018	7	7	0,42	5	3,901
		2019	7	7	0,42	5	3,901

		2020	7	7	0,42	6	3,901
16.	WSKT	2016	6	6	0,33	4	1,915
		2017	5	6	0,33	4	1,915
		2018	7	7	0,42	4	1,915
		2019	7	7	0,42	4	1,915
		2020	7	7	0,42	4	1,915
17.	BBNI	2016	10	8	0,625	3	1,863
		2017	10	8	0,5	4	1,863
		2018	11	9	0,55	4	1,863
		2019	11	8	0,625	4	0,436
		2020	10	12	0,6	5	0,436
18.	BBRI	2016	11	9	0,55	6	2,432
		2017	11	11	0,45	6	2,432
		2018	14	10	0,5	6	2,432
		2019	14	11	0,45	6	2,432
		2020	14	11	0,5	9	2,342
19.	BBTN	2016	8	7	0,57	7	1,933
		2017	8	8	0,625	6	1,933
		2018	9	9	0,55	7	1,933
		2019	8	6	0,5	2	1,933
		2020	7	6	0,5	4	1,933
20.	BMRI	2016	11	8	0,625	6	1,371
		2017	10	8	0,5	9	1,371
		2018	11	8	0,5	9	1,371
		2019	12	8	0,5	7	1,371
		2020	12	10	0,5	8	1,371

Uji asumsi klasik