

LAMPIRAN.

Z score

X1

PERUSAHAAN	TAHUN	$WCTA = \frac{\text{Current Asset} - \text{Current Liability}}{\text{Total Aset}}$			WCTA
		CURRENT ASET	CURRENT LIABILITY	TOTAL ASET	
ACES	2016	Rp2,822,069,744,478	Rp388,653,022,672	Rp3,731,101,667,891	0.65
ACES	2017	Rp3,358,272,302,312	Rp478,208,556,747	Rp4,428,840,550,479	0.65
ACES	2018	Rp4,096,280,475,383	Rp631,055,459,387	Rp5,321,180,855,541	0.65
ACES	2019	Rp4,369,550,647,718	Rp783,375,432,849	Rp6,641,808,005,145	0.54
ACES	2020	Rp5,034,737,166,320	Rp844,928,054,206	Rp7,247,063,894,294	0.58
AMRT	2016	Rp10,232,917,000,000	Rp11,420,080,000,000	Rp19,474,367,000,000	(0.06)
AMRT	2017	Rp11,544,190,000,000	Rp13,055,903,000,000	Rp21,901,740,000,000	(0.07)
AMRT	2018	Rp12,791,052,000,000	Rp11,126,956,000,000	Rp22,165,988,000,000	0.08
AMRT	2019	Rp14,782,817,000,000	Rp13,167,601,000,000	Rp23,992,313,000,000	0.07
AMRT	2020	Rp13,558,536,000,000	Rp15,326,139,000,000	Rp25,970,743,000,000	(0.07)
CENT	2016	Rp214,293,129,498	Rp149,005,855,074	Rp1,314,929,550,049	0.05
CENT	2017	Rp765,449,000,000	Rp737,171,000,000	Rp4,494,835,000,000	0.01
CENT	2018	Rp940,154,000,000	Rp778,970,000,000	Rp5,207,342,000,000	0.03
CENT	2019	Rp1,285,023,000,000	Rp1,255,977,000,000	Rp5,729,085,000,000	0.01
CENT	2020	Rp1,116,644,000,000	Rp4,983,388,000,000	Rp7,629,153,000,000	(0.51)
CSAP	2016	Rp3,134,576,683,000	Rp2,492,613,396,000	Rp4,240,820,320,000	0.15
CSAP	2017	Rp3,662,499,520,000	Rp3,159,792,330,000	Rp5,138,259,285,000	0.10
CSAP	2018	Rp4,086,694,094,000	Rp3,302,706,214,000	Rp5,785,287,553,000	0.14
CSAP	2019	Rp4,502,446,283,000	Rp3,956,848,238,000	Rp6,584,587,023,000	0.08
CSAP	2020	Rp4,419,656,047,000	Rp4,060,960,933,000	Rp7,616,266,096,000	0.05
DAYA	2016	Rp137,984,014,000	Rp83,890,411,000	Rp199,332,019,000	0.27
DAYA	2017	Rp189,712,241,000	Rp121,112,835,000	Rp275,708,556,000	

					0.25
DAYA	2018	Rp287,204,854,000	Rp238,168,553,000	Rp411,861,480,000	0.12
DAYA	2019	Rp321,475,087,000	Rp411,740,929,000	Rp730,497,952,000	(0.12)
DAYA	2020	Rp314,742,151,000	Rp460,174,368,000	Rp708,530,092,000	(0.21)
ECII	2016	Rp1,250,758,287,498	Rp121,582,650,793	Rp1,881,645,933,066	0.60
ECII	2017	Rp786,009,494,559	Rp336,414,143,769	Rp1,717,972,026,282	0.26
ECII	2018	Rp752,676,010,865	Rp353,191,107,837	Rp1,751,622,687,179	0.23
ECII	2019	Rp831,937,034,323	Rp399,844,207,730	Rp1,845,324,374,750	0.23
ECII	2020	Rp953,327,437,749	Rp397,514,035,472	Rp1,730,596,456,562	0.32
ERAA	2016	Rp5,168,222,743,605	Rp3,935,217,294,429	Rp7,424,604,403,847	0.17
ERAA	2017	Rp6,684,618,036,000	Rp5,048,800,299,000	Rp8,873,955,770,000	0.18
ERAA	2018	Rp10,053,691,913,000	Rp7,740,591,920,000	Rp12,682,902,626,000	0.18
ERAA	2019	Rp6,944,525,743,000	Rp4,615,531,135,000	Rp9,747,703,198,000	0.24
ERAA	2020	Rp7,546,995,255,000	Rp5,142,950,705,000	Rp11,211,369,042,000	0.21
GLOB	2016	Rp40,903,659,907	Rp257,403,914,084	Rp74,599,266,089	(2.90)
GLOB	2017	Rp32,500,867,639	Rp247,283,351,333	Rp60,812,090,345	(3.53)
GLOB	2018	Rp22,136,300,869	Rp258,420,563,998	Rp37,180,128,513	(6.36)
GLOB	2019	Rp6,415,449,405	Rp300,809,467,631	Rp8,278,414,392	(35.56)
GLOB	2020	Rp8,968,497,949	Rp408,738,803,147	Rp10,616,363,611	(37.66)
HERO	2016	Rp2,817,240,000,000	Rp1,970,941,000,000	Rp7,487,033,000,000	0.11
HERO	2017	Rp2,544,725,000,000	Rp2,001,461,000,000	Rp7,363,144,000,000	0.07
HERO	2018	Rp2,845,304,000,000	Rp2,174,008,000,000	Rp6,154,748,000,000	0.11
HERO	2019	Rp2,417,001,000,000	Rp2,038,174,000,000	Rp6,054,384,000,000	0.06
HERO	2020	Rp1,540,143,000,000	Rp2,278,042,000,000	Rp4,838,417,000,000	(0.15)
KOIN	2016	Rp652,906,785,206	Rp562,685,685,627	Rp708,069,212,062	0.13
KOIN	2017	Rp700,601,436,035	Rp609,522,247,224	Rp743,789,368,008	0.12
KOIN	2018	Rp803,042,816,102	Rp734,503,822,439	Rp855,572,807,455	0.08
KOIN	2019	Rp592,578,908,193	Rp553,865,665,830	Rp652,346,214,673	0.06
KOIN	2020	Rp606,903,824,102	Rp529,614,198,284	Rp675,863,759,206	

					0.11
LPPF	2016	Rp2,974,052,000,000	Rp2,588,354,000,000	Rp4,858,878,000,000	0.08
LPPF	2017	Rp2,973,749,000,000	Rp2,610,824,000,000	Rp5,427,426,000,000	0.07
LPPF	2018	Rp3,014,408,000,000	Rp2,739,811,000,000	Rp5,036,396,000,000	0.05
LPPF	2019	Rp2,748,781,000,000	Rp2,597,839,000,000	Rp4,832,910,000,000	0.03
LPPF	2020	Rp1,610,213,000,000	Rp2,856,300,000,000	Rp6,319,074,000,000	(0.20)
MAPI	2016	Rp6,616,255,899,000	Rp4,181,304,246,000	Rp10,683,437,788,000	0.23
MAPI	2017	Rp6,798,523,000,000	Rp4,564,695,000,000	Rp11,425,390,000,000	0.20
MAPI	2018	Rp7,312,798,000,000	Rp5,418,884,000,000	Rp12,632,671,000,000	0.15
MAPI	2019	Rp8,160,173,000,000	Rp5,673,585,000,000	Rp13,937,115,000,000	0.18
MAPI	2020	Rp8,165,336,000,000	Rp7,344,835,000,000	Rp17,650,451,000,000	0.05
MIDI	2016	Rp1,720,167,000,000	Rp2,245,119,000,000	Rp4,261,283,000,000	(0.12)
MIDI	2017	Rp1,970,840,000,000	Rp2,732,215,000,000	Rp4,878,115,000,000	(0.16)
MIDI	2018	Rp2,174,526,000,000	Rp2,959,873,000,000	Rp4,960,145,000,000	(0.16)
MIDI	2019	Rp2,255,382,000,000	Rp2,898,464,000,000	Rp4,990,309,000,000	(0.13)
MIDI	2020	Rp2,205,519,000,000	Rp3,395,618,000,000	Rp5,923,693,000,000	(0.20)
MKNT	2016	Rp149,728,404,901	Rp23,886,859,650	Rp157,848,592,051	0.80
MKNT	2017	Rp863,412,945,202	Rp665,248,549,440	Rp968,128,268,255	0.20
MKNT	2018	Rp761,294,934,968	Rp558,243,039,723	Rp855,096,628,586	0.24
MKNT	2019	Rp709,841,405,850	Rp171,710,454,969	Rp741,824,867,681	0.73
MKNT	2020	Rp487,165,020,354	Rp131,704,896,918	Rp500,766,702,549	0.71
MPPA	2016	Rp4,102,458,000,000	Rp3,333,880,000,000	Rp6,701,734,000,000	0.11
MPPA	2017	Rp2,485,833,000,000	Rp3,876,194,000,000	Rp5,427,059,000,000	(0.26)
MPPA	2018	Rp2,472,849,000,000	Rp2,887,516,000,000	Rp4,808,545,000,000	(0.09)
MPPA	2019	Rp1,904,047,000,000	Rp2,618,390,000,000	Rp3,820,809,000,000	(0.19)
MPPA	2020	Rp1,535,266,000,000	Rp2,763,099,000,000	Rp4,510,511,000,000	(0.27)
RALS	2016	Rp2,830,815,000,000	Rp1,008,981,000,000	Rp4,647,009,000,000	0.39
RALS	2017	Rp3,093,496,000,000	Rp1,048,640,000,000	Rp4,891,922,000,000	0.42
RALS	2018	Rp3,557,488,000,000	Rp1,093,095,000,000	Rp5,243,047,000,000	

					0.47
RALS	2019	Rp4,017,659,000,000	Rp1,135,638,000,000	Rp5,649,823,000,000	0.51
RALS	2020	Rp3,200,854,000,000	Rp925,658,000,000	Rp5,285,218,000,000	0.43
RANC	2016	Rp405,493,726,841	Rp254,396,030,475	Rp721,237,977,450	0.21
RANC	2017	Rp483,421,701,709	Rp302,213,795,172	Rp804,020,324,861	0.23
RANC	2018	Rp544,178,319,988	Rp348,666,837,381	Rp904,003,739,438	0.22
RANC	2019	Rp589,611,662,008	Rp348,625,244,359	Rp952,496,300,846	0.25
RANC	2020	Rp625,866,677,394	Rp512,965,592,357	Rp1,319,134,443,995	0.09
SONA	2016	Rp726,322,485,853	Rp446,585,300,387	Rp1,031,213,478,568	0.27
SONA	2017	Rp828,525,701,589	Rp504,553,387,288	Rp1,141,551,052,237	0.28
SONA	2018	Rp998,371,024,853	Rp488,710,639,868	Rp1,250,810,082,430	0.41
SONA	2019	Rp902,827,833,509	Rp277,278,528,644	Rp1,110,366,038,014	0.56
SONA	2020	Rp732,256,750,960	Rp150,391,014,535	Rp853,905,287,718	0.68
TELE	2016	Rp7,472,601,000,000	Rp1,247,690,000,000	Rp8,215,481,000,000	0.76
TELE	2017	Rp8,025,250,000,000	Rp2,068,709,000,000	Rp8,749,797,000,000	0.68
TELE	2018	Rp7,609,754,000,000	Rp1,466,633,000,000	Rp8,339,085,000,000	0.74
TELE	2019	Rp1,229,572,000,000	Rp3,911,088,000,000	Rp2,956,614,000,000	(0.91)
TELE	2020	Rp185,898,000,000	Rp3,949,979,000,000	Rp325,450,000,000	(11.57)
TRIO	2016	Rp228,937,342,571	Rp4,204,061,085,053	Rp430,032,185,417	(9.24)
TRIO	2017	Rp174,277,930,855	Rp670,486,781,041	Rp267,494,791,082	(1.86)
TRIO	2018	Rp128,387,536,230	Rp829,311,833,210	Rp193,663,107,384	(3.62)
TRIO	2019	Rp102,911,590,387	Rp809,331,977,134	Rp136,433,406,842	(5.18)
TRIO	2020	Rp70,185,025,171	Rp972,203,816,034	Rp111,295,495,695	(8.10)

X2

PERUSAHAAN	TAHUN	$REAT = \frac{\text{Retained Earning}}{\text{Total Asset}}$		REAT
		TOTAL ASET	RETAINED EARNING	
ACES	2016	Rp 3,731,101,667,891	Rp 2,281,850,584,826	0.612
ACES	2017	Rp 4,428,840,550,479	Rp 2,669,380,365,072	0.603
ACES	2018	Rp 5,321,180,855,541	Rp 3,234,114,092,793	0.608

ACES	2019	Rp	6,641,808,005,145	Rp	3,622,463,703,313	0.545
ACES	2020	Rp	7,247,063,894,294	Rp	4,146,745,643,645	0.572
AMRT	2016	Rp	19,474,367,000,000	Rp	2,638,527,000,000	0.135
AMRT	2017	Rp	21,901,740,000,000	Rp	2,757,170,000,000	0.126
AMRT	2018	Rp	22,165,988,000,000	Rp	3,166,712,000,000	0.143
AMRT	2019	Rp	23,992,313,000,000	Rp	4,168,600,000,000	0.174
AMRT	2020	Rp	25,970,743,000,000	Rp	4,423,085,000,000	0.170
CENT	2016	Rp	1,314,929,550,049	-Rp	133,399,882,518	-0.101
CENT	2017	Rp	4,494,835,000,000	-Rp	252,447,000,000	-0.056
CENT	2018	Rp	5,207,342,000,000	-Rp	216,810,000,000	-0.042
CENT	2019	Rp	5,729,085,000,000	-Rp	207,898,000,000	-0.036
CENT	2020	Rp	7,629,153,000,000	-Rp	723,183,000,000	-0.095
CSAP	2016	Rp	4,240,820,320,000	Rp	480,616,457,000	0.113
CSAP	2017	Rp	5,138,259,285,000	Rp	553,625,808,000	0.108
CSAP	2018	Rp	5,785,287,553,000	Rp	632,806,029,000	0.109
CSAP	2019	Rp	6,584,587,023,000	Rp	663,776,350,000	0.101
CSAP	2020	Rp	7,616,266,096,000	Rp	745,082,928,000	0.098
DAYA	2016	Rp	199,332,019,000	Rp	128,978,993,000	0.647
DAYA	2017	Rp	275,708,556,000	Rp	261,378,490,000	0.948
DAYA	2018	Rp	411,861,480,000	Rp	372,862,221,000	0.905
DAYA	2019	Rp	730,497,952,000	Rp	534,758,984,000	0.732
DAYA	2020	Rp	708,530,092,000	Rp	167,458,939,000	0.236
ECII	2016	Rp	1,881,645,933,066	Rp	420,119,274,515	0.223
ECII	2017	Rp	1,717,972,026,282	Rp	31,175,225,896	0.018
ECII	2018	Rp	1,751,622,687,179	Rp	40,502,957,287	0.023
ECII	2019	Rp	1,845,324,374,750	Rp	72,363,471,689	0.039
ECII	2020	Rp	1,730,596,456,562	Rp	51,001,987,460	0.029
ERAA	2016	Rp	7,424,604,403,847	Rp	1,456,979,619,065	0.196
ERAA	2017	Rp	8,873,955,770,000	Rp	1,737,437,809,000	0.196
ERAA	2018	Rp	12,682,902,626,000	Rp	2,476,327,506,000	0.195
ERAA	2019	Rp	9,747,703,198,000	Rp	2,610,893,958,000	0.268
ERAA	2020	Rp	11,211,369,042,000	Rp	3,201,412,210,000	0.286
GLOB	2016	Rp	74,599,266,089	-Rp	905,719,844,846	-12.141
GLOB	2017	Rp	60,812,090,345	-Rp	920,283,237,109	-15.133
GLOB	2018	Rp	37,180,128,513	-Rp	941,774,829,831	-25.330
GLOB	2019	Rp	8,278,414,392	-Rp	981,500,329,458	-118.561
GLOB	2020	Rp	10,616,363,611	-Rp	1,031,813,832,594	-97.191
HERO	2016	Rp	7,487,033,000,000	Rp	2,218,541,000,000	0.296
HERO	2017	Rp	7,363,144,000,000	Rp	1,959,501,000,000	0.266
HERO	2018	Rp	6,154,748,000,000	Rp	585,136,000,000	0.095
HERO	2019	Rp	6,054,384,000,000	Rp	650,809,000,000	0.107
HERO	2020	Rp	4,838,417,000,000	-Rp	1,384,554,000,000	-0.286
KOIN	2016	Rp	708,069,212,062	Rp	17,698,797,370	0.025
KOIN	2017	Rp	743,789,368,008	Rp	8,038,499,096	0.011
KOIN	2018	Rp	855,572,807,455	-Rp	446,313,077	-0.001

KOIN	2019	Rp	652,346,214,673	-Rp	17,497,607,703	-0.027
KOIN	2020	Rp	675,863,759,206	Rp	23,067,574,612	0.034
LPPF	2016	Rp	4,858,878,000,000	Rp	4,923,986,000,000	1.013
LPPF	2017	Rp	5,427,426,000,000	Rp	5,396,728,000,000	0.994
LPPF	2018	Rp	5,036,396,000,000	Rp	5,208,079,000,000	1.034
LPPF	2019	Rp	4,832,910,000,000	Rp	5,255,184,000,000	1.087
LPPF	2020	Rp	6,319,074,000,000	Rp	3,741,255,000,000	0.592
MAPI	2016	Rp	10,683,437,788,000	Rp	1,859,577,857,000	0.174
MAPI	2017	Rp	11,425,390,000,000	Rp	2,147,886,000,000	0.188
MAPI	2018	Rp	12,632,671,000,000	Rp	2,812,567,000,000	0.223
MAPI	2019	Rp	13,937,115,000,000	Rp	3,575,664,000,000	0.257
MAPI	2020	Rp	17,650,451,000,000	Rp	2,838,751,000,000	0.161
MIDI	2016	Rp	4,261,283,000,000	Rp	513,392,000,000	0.120
MIDI	2017	Rp	4,878,115,000,000	Rp	556,116,000,000	0.114
MIDI	2018	Rp	4,960,145,000,000	Rp	683,426,000,000	0.138
MIDI	2019	Rp	4,990,309,000,000	Rp	837,640,000,000	0.168
MIDI	2020	Rp	5,923,693,000,000	Rp	975,806,000,000	0.165
MKNT	2016	Rp	157,848,592,051	Rp	9,439,321,865	0.060
MKNT	2017	Rp	968,128,268,255	Rp	33,569,791,069	0.035
MKNT	2018	Rp	855,096,628,586	Rp	25,957,469,453	0.030
MKNT	2019	Rp	741,824,867,681	-Rp	50,403,063,490	-0.068
MKNT	2020	Rp	500,766,702,549	-Rp	101,379,799,741	-0.202
MPPA	2016	Rp	6,701,734,000,000	Rp	1,352,226,000,000	0.202
MPPA	2017	Rp	5,427,059,000,000	Rp	94,665,000,000	0.017
MPPA	2018	Rp	4,808,545,000,000	-Rp	731,341,000,000	-0.152
MPPA	2019	Rp	3,820,809,000,000	-Rp	1,349,905,000,000	-0.353
MPPA	2020	Rp	4,510,511,000,000	-Rp	1,695,855,000,000	-0.376
RALS	2016	Rp	4,647,009,000,000	Rp	3,177,049,000,000	0.684
RALS	2017	Rp	4,891,922,000,000	Rp	3,341,608,000,000	0.683
RALS	2018	Rp	5,243,047,000,000	Rp	3,659,800,000,000	0.698
RALS	2019	Rp	5,649,823,000,000	Rp	3,970,557,000,000	0.703
RALS	2020	Rp	5,285,218,000,000	Rp	3,494,559,000,000	0.661
RANC	2016	Rp	721,237,977,450	Rp	152,329,300,723	0.211
RANC	2017	Rp	804,020,324,861	Rp	180,263,362,810	0.224
RANC	2018	Rp	904,003,739,438	Rp	223,488,211,893	0.247
RANC	2019	Rp	952,496,300,846	Rp	264,689,333,957	0.278
RANC	2020	Rp	1,319,134,443,995	Rp	258,687,083,714	0.196
SONA	2016	Rp	1,031,213,478,568	Rp	349,209,852,293	0.339
SONA	2017	Rp	1,141,551,052,237	Rp	401,545,523,690	0.352
SONA	2018	Rp	1,250,810,082,430	Rp	525,510,209,832	0.420
SONA	2019	Rp	1,110,366,038,014	Rp	595,427,466,633	0.536
SONA	2020	Rp	853,905,287,718	Rp	465,003,629,780	0.545
TELE	2016	Rp	8,215,481,000,000	Rp	1,508,917,000,000	0.184
TELE	2017	Rp	8,749,797,000,000	Rp	1,801,113,000,000	0.206
TELE	2018	Rp	8,339,085,000,000	Rp	2,210,033,000,000	0.265

TELE	2019	Rp	2,956,614,000,000	-Rp	3,393,299,000,000	-1.148
TELE	2020	Rp	325,450,000,000	-Rp	5,906,816,000,000	-18.150
TRIO	2016	Rp	430,032,185,417	-Rp	7,551,893,657,660	-17.561
TRIO	2017	Rp	267,494,791,082	-Rp	7,760,519,339,744	-29.012
TRIO	2018	Rp	193,663,107,384	-Rp	7,774,975,211,443	-40.147
TRIO	2019	Rp	136,433,406,842	-Rp	7,886,004,649,825	-57.801
TRIO	2020	Rp	111,295,495,695	-Rp	8,154,236,091,000	-73.267

X3

PERUSAHAAN	TAHUN	$EBITTA = \frac{\text{Earning Before Interest And Taxes}}{\text{Total Aset}}$		EBITA
		EBIT	TOTAL ASET	
ACES	2016	Rp 863,127,561,485	Rp 3,731,101,667,891	0.231
ACES	2017	Rp 959,980,347,383	Rp 4,428,840,550,479	0.217
ACES	2018	Rp 1,202,709,103,365	Rp 5,321,180,855,541	0.226
ACES	2019	Rp 1,262,709,647,429	Rp 6,641,808,005,145	0.190
ACES	2020	Rp 923,335,768,686	Rp 7,247,063,894,294	0.127
AMRT	2016	Rp 681,896,000,000	Rp 19,474,367,000,000	0.035
AMRT	2017	Rp 381,342,000,000	Rp 21,901,740,000,000	0.017
AMRT	2018	Rp 867,131,000,000	Rp 22,165,988,000,000	0.039
AMRT	2019	Rp 1,414,137,000,000	Rp 23,992,313,000,000	0.059
AMRT	2020	Rp 1,352,466,000,000	Rp 25,970,743,000,000	0.052
CENT	2016	-Rp 31,576,229,003	Rp 1,314,929,550,049	-0.024
CENT	2017	-Rp 113,484,000,000	Rp 4,494,835,000,000	-0.025
CENT	2018	Rp 21,571,000,000	Rp 5,207,342,000,000	0.004
CENT	2019	Rp 43,473,000,000	Rp 5,729,085,000,000	0.008
CENT	2020	-Rp 476,417,000,000	Rp 7,629,153,000,000	-0.062
CSAP	2016	Rp 100,896,941,000	Rp 4,240,820,320,000	0.024
CSAP	2017	Rp 115,130,429,000	Rp 5,138,259,285,000	0.022
CSAP	2018	Rp 131,939,083,000	Rp 5,785,287,553,000	0.023
CSAP	2019	Rp 105,046,392,000	Rp 6,584,587,023,000	0.016
CSAP	2020	Rp 114,757,297,000	Rp 7,616,266,096,000	0.015
DAYA	2016	-Rp 23,586,266,000	Rp 199,332,019,000	-0.118
DAYA	2017	-Rp 3,725,989,000	Rp 275,708,556,000	-0.014
DAYA	2018	Rp 2,448,671,000	Rp 411,861,480,000	0.006
DAYA	2019	Rp 12,645,238,000	Rp 730,497,952,000	0.017
DAYA	2020	-Rp 45,983,478,000	Rp 708,530,092,000	-0.065
ECII	2016	-Rp 33,741,336,231	Rp 1,881,645,933,066	-0.018
ECII	2017	-Rp 5,806,442,290	Rp 1,717,972,026,282	-0.003
ECII	2018	Rp 7,082,402,298	Rp 1,751,622,687,179	0.004

ECII	2019	Rp	31,921,633,688	Rp	1,845,324,374,750	0.017
ECII	2020	-Rp	16,619,896,032	Rp	1,730,596,456,562	-0.010
ERAA	2016	Rp	383,536,614,051	Rp	7,424,604,403,847	0.052
ERAA	2017	Rp	479,656,198,000	Rp	8,873,955,770,000	0.054
ERAA	2018	Rp	1,203,140,844,000	Rp	12,682,902,626,000	0.095
ERAA	2019	Rp	472,719,996,000	Rp	9,747,703,198,000	0.048
ERAA	2020	Rp	917,316,742,000	Rp	11,211,369,042,000	0.082
GLOB	2016	-Rp	120,038,363,955	Rp	74,599,266,089	-1.609
GLOB	2017	-Rp	12,605,133,764	Rp	60,812,090,345	-0.207
GLOB	2018	-Rp	21,050,797,268	Rp	37,180,128,513	-0.566
GLOB	2019	-Rp	37,297,602,565	Rp	8,278,414,392	-4.505
GLOB	2020	-Rp	50,662,749,679	Rp	10,616,363,611	-4.772
HERO	2016	Rp	184,449,000,000	Rp	7,487,033,000,000	0.025
HERO	2017	-Rp	251,647,000,000	Rp	7,363,144,000,000	-0.034
HERO	2018	-Rp	1,252,995,000,000	Rp	6,154,748,000,000	-0.204
HERO	2019	Rp	55,728,000,000	Rp	6,054,384,000,000	0.009
HERO	2020	-Rp	1,027,133,000,000	Rp	4,838,417,000,000	-0.212
KOIN	2016	Rp	130,368,081	Rp	708,069,212,062	0.000
KOIN	2017	-Rp	7,244,550,782	Rp	743,789,368,008	-0.010
KOIN	2018	-Rp	8,325,461,068	Rp	855,572,807,455	-0.010
KOIN	2019	-Rp	15,480,984,182	Rp	652,346,214,673	-0.024
KOIN	2020	Rp	52,764,018,688	Rp	675,863,759,206	0.078
LPPF	2016	Rp	2,532,666,000,000	Rp	4,858,878,000,000	0.521
LPPF	2017	Rp	2,396,300,000,000	Rp	5,427,426,000,000	0.442
LPPF	2018	Rp	1,575,321,000,000	Rp	5,036,396,000,000	0.313
LPPF	2019	Rp	1,763,009,000,000	Rp	4,832,910,000,000	0.365
LPPF	2020	-Rp	934,404,000,000	Rp	6,319,074,000,000	-0.148
MAPI	2016	Rp	401,490,328,000	Rp	10,683,437,788,000	0.038
MAPI	2017	Rp	597,451,000,000	Rp	11,425,390,000,000	0.052
MAPI	2018	Rp	1,173,417,000,000	Rp	12,632,671,000,000	0.093
MAPI	2019	Rp	1,625,502,000,000	Rp	13,937,115,000,000	0.117
MAPI	2020	-Rp	723,806,000,000	Rp	17,650,451,000,000	-0.041
MIDI	2016	Rp	248,497,000,000	Rp	4,261,283,000,000	0.058
MIDI	2017	Rp	123,249,000,000	Rp	4,878,115,000,000	0.025
MIDI	2018	Rp	197,098,000,000	Rp	4,960,145,000,000	0.040
MIDI	2019	Rp	270,473,000,000	Rp	4,990,309,000,000	0.054
MIDI	2020	Rp	261,024,000,000	Rp	5,923,693,000,000	0.044
MKNT	2016	Rp	3,413,803,149	Rp	157,848,592,051	0.022
MKNT	2017	Rp	51,456,169,951	Rp	968,128,268,255	0.053
MKNT	2018	Rp	9,823,131,713	Rp	855,096,628,586	0.011
MKNT	2019	-Rp	114,292,275,998	Rp	741,824,867,681	-0.154
MKNT	2020	-Rp	55,495,245,361	Rp	500,766,702,549	-0.111
MPPA	2016	Rp	101,112,000,000	Rp	6,701,734,000,000	0.015
MPPA	2017	-Rp	1,669,614,000,000	Rp	5,427,059,000,000	-0.308
MPPA	2018	-Rp	1,070,666,000,000	Rp	4,808,545,000,000	-0.223

MPPA	2019	-Rp	314,601,000,000	Rp	3,820,809,000,000	-0.082
MPPA	2020	-Rp	407,687,000,000	Rp	4,510,511,000,000	-0.090
RALS	2016	Rp	465,065,000,000	Rp	4,647,009,000,000	0.100
RALS	2017	Rp	466,592,000,000	Rp	4,891,922,000,000	0.095
RALS	2018	Rp	717,172,000,000	Rp	5,243,047,000,000	0.137
RALS	2019	Rp	733,161,000,000	Rp	5,649,823,000,000	0.130
RALS	2020	Rp	181,445,000,000	Rp	5,285,218,000,000	0.034
RANC	2016	Rp	49,707,851,202	Rp	721,237,977,450	0.069
RANC	2017	Rp	47,109,826,388	Rp	804,020,324,861	0.059
RANC	2018	Rp	59,877,255,323	Rp	904,003,739,438	0.066
RANC	2019	Rp	64,038,406,949	Rp	952,496,300,846	0.067
RANC	2020	Rp	94,284,369,099	Rp	1,319,134,443,995	0.071
SONA	2016	-Rp	5,503,061,803	Rp	1,031,213,478,568	-0.005
SONA	2017	Rp	69,184,005,689	Rp	1,141,551,052,237	0.061
SONA	2018	Rp	162,897,913,618	Rp	1,250,810,082,430	0.130
SONA	2019	Rp	104,353,775,859	Rp	1,110,366,038,014	0.094
SONA	2020	-Rp	170,065,963,842	Rp	853,905,287,718	-0.199
TELE	2016	Rp	634,448,000,000	Rp	8,215,481,000,000	0.077
TELE	2017	Rp	561,247,000,000	Rp	8,749,797,000,000	0.064
TELE	2018	Rp	610,241,000,000	Rp	8,339,085,000,000	0.073
TELE	2019	-Rp	7,065,747,000,000	Rp	2,956,614,000,000	-2.390
TELE	2020	-Rp	1,063,160,000,000	Rp	325,450,000,000	-3.267
TRIO	2016	-Rp	434,721,028,687	Rp	430,032,185,417	-1.011
TRIO	2017	-Rp	124,815,870,429	Rp	267,494,791,082	-0.467
TRIO	2018	-Rp	12,273,399,044	Rp	193,663,107,384	-0.063
TRIO	2019	-Rp	101,986,961,830	Rp	136,433,406,842	-0.748
TRIO	2020	-Rp	277,923,559,679	Rp	111,295,495,695	-2.497

X4

PERUSAHAAN	TAHUN	$MVEBVT = \frac{\text{Market Value Of Equity}}{\text{Book Value Of Total Asset}}$		MVEBVT
		MVE	BVT	
ACES	2016	Rp 14,320,250,000,000	Rp 682,373,973,095	20.986
ACES	2017	Rp 19,808,250,000,000	Rp 918,418,702,689	21.568
ACES	2018	Rp 25,553,500,000,000	Rp 1,085,709,809,612	23.536
ACES	2019	Rp 25,639,250,000,000	Rp 1,965,506,710,879	13.045
ACES	2020	Rp 29,412,250,000,000	Rp 2,024,821,339,896	14.526
AMRT	2016	Rp 25,952,813,562,500	Rp 14,179,604,000,000	1.830
AMRT	2017	Rp 25,329,946,037,000	Rp 16,651,570,000,000	1.521
AMRT	2018	Rp 38,825,409,089,500	Rp 16,148,410,000,000	2.404
AMRT	2019	Rp 36,541,561,496,000	Rp 17,108,006,000,000	2.136
AMRT	2020	Rp 33,219,601,360,000	Rp 18,334,415,000,000	1.812
CENT	2016	Rp 1,372,072,455,600	Rp 277,474,241,822	4.945

CENT	2017	Rp	2,494,677,192,000	Rp	1,526,720,000,000	1.634
CENT	2018	Rp	2,681,777,981,400	Rp	2,168,918,000,000	1.236
CENT	2019	Rp	2,338,759,867,500	Rp	2,714,193,000,000	0.862
CENT	2020	Rp	4,428,052,015,800	Rp	5,157,414,000,000	0.859
CSAP	2016	Rp	2,127,852,783,000	Rp	2,829,046,007,000	0.752
CSAP	2017	Rp	1,840,086,025,680	Rp	3,612,982,306,000	0.509
CSAP	2018	Rp	2,208,913,841,400	Rp	3,844,633,517,000	0.575
CSAP	2019	Rp	2,006,258,814,000	Rp	4,612,787,339,000	0.435
CSAP	2020	Rp	1,720,924,227,120	Rp	5,562,713,870,000	0.309
DAYA	2016	Rp	405,295,605,000	Rp	99,743,766,000,000	0.004
DAYA	2017	Rp	421,399,004,985	Rp	154,880,476,000,000	0.003
DAYA	2018	Rp	508,314,875,250	Rp	248,458,704,000,000	0.002
DAYA	2019	Rp	726,164,107,500	Rp	560,812,496,000,000	0.001
DAYA	2020	Rp	944,013,339,750	Rp	588,386,520,000,000	0.002
ECII	2016	Rp	800,599,800,000	Rp	153,884,348,892	5.203
ECII	2017	Rp	807,271,465,000	Rp	379,156,971,955	2.129
ECII	2018	Rp	1,507,796,290,000	Rp	405,075,371,341	3.722
ECII	2019	Rp	1,347,676,330,000	Rp	465,328,532,936	2.896
ECII	2020	Rp	873,988,115,000	Rp	477,783,003,641	1.829
ERAA	2016	Rp	1,740,000,000,000	Rp	4,015,443,128,834	0.433
ERAA	2017	Rp	2,131,500,000,000	Rp	5,617,301,251,000	0.379
ERAA	2018	Rp	7,018,000,000,000	Rp	7,867,284,389,000	0.892
ERAA	2019	Rp	5,726,050,000,000	Rp	4,615,531,135,000	1.241
ERAA	2020	Rp	7,018,000,000,000	Rp	5,523,372,852,000	1.271
GLOB	2016	Rp	506,667,072,000	Rp	754,629,547,345	0.671
GLOB	2017	Rp	506,667,072,000	Rp	744,844,128,875	0.680
GLOB	2018	Rp	360,000,288,000	Rp	742,492,407,888	0.485
GLOB	2019	Rp	424,444,784,000	Rp	753,250,620,180	0.563
GLOB	2020	Rp	121,111,208,000	Rp	806,179,231,356	0.150
HERO	2016	Rp	5,271,378,840,000	Rp	2,029,250,000,000	2.598
HERO	2017	Rp	3,869,861,450,000	Rp	2,164,401,000,000	1.788
HERO	2018	Rp	3,305,070,860,000	Rp	2,330,370,000,000	1.418
HERO	2019	Rp	3,723,434,260,000	Rp	2,387,822,000,000	1.559
HERO	2020	Rp	3,472,416,220,000	Rp	2,983,729,000,000	1.164
KOIN	2016	Rp	294,253,119,600	Rp	586,844,471,674	0.501
KOIN	2017	Rp	292,291,432,136	Rp	632,224,926,090	0.462
KOIN	2018	Rp	227,555,745,824	Rp	752,493,177,515	0.302
KOIN	2019	Rp	107,892,810,520	Rp	553,865,665,830	0.195
KOIN	2020	Rp	99,065,216,932	Rp	549,614,198,284	0.180
LPPF	2016	Rp	44,133,510,960,000	Rp	3,003,635,000,000	14.693
LPPF	2017	Rp	29,179,180,800,000	Rp	3,099,441,000,000	9.414
LPPF	2018	Rp	16,340,341,248,000	Rp	3,220,568,000,000	5.074
LPPF	2019	Rp	12,284,435,116,800	Rp	3,086,283,000,000	3.980
LPPF	2020	Rp	3,720,345,552,000	Rp	5,737,956,000,000	0.648
MAPI	2016	Rp	8,964,000,000,000	Rp	7,479,927,515,000	1.198

MAPI	2017	Rp	10,292,000,000,000	Rp	7,182,976,000,000	1.433
MAPI	2018	Rp	13,363,000,000,000	Rp	6,570,485,000,000	2.034
MAPI	2019	Rp	1,751,300,000,000	Rp	6,566,570,000,000	0.267
MAPI	2020	Rp	1,311,400,000,000	Rp	11,151,051,000,000	0.118
MIDI	2016	Rp	2,334,705,930,000	Rp	3,366,178,000,000	0.694
MIDI	2017	Rp	3,026,470,650,000	Rp	3,955,245,000,000	0.765
MIDI	2018	Rp	3,084,117,710,000	Rp	3,879,324,000,000	0.795
MIDI	2019	Rp	3,314,705,950,000	Rp	3,769,310,000,000	0.879
MIDI	2020	Rp	5,548,529,525,000	Rp	4,524,990,000,000	1.226
MKNT	2016	Rp	540,000,000,000	Rp	23,886,859,650	22.607
MKNT	2017	Rp	1,310,000,000,000	Rp	665,248,549,440	1.969
MKNT	2018	Rp	975,000,000,000	Rp	579,834,253,250	1.682
MKNT	2019	Rp	250,000,000,000	Rp	629,343,184,223	0.397
MKNT	2020	Rp	250,000,000,000	Rp	457,842,864,872	0.546
MPPA	2016	Rp	7,959,384,944,000	Rp	4,272,002,000,000	1.863
MPPA	2017	Rp	2,430,839,185,600	Rp	4,252,888,000,000	0.572
MPPA	2018	Rp	1,144,430,483,840	Rp	2,887,516,000,000	0.396
MPPA	2019	Rp	1,054,080,708,800	Rp	3,290,128,000,000	0.320
MPPA	2020	Rp	790,560,531,600	Rp	4,325,777,000,000	0.183
RALS	2016	Rp	8,479,720,000,000	Rp	1,309,610,000,000	6.475
RALS	2017	Rp	8,515,200,000,000	Rp	1,397,577,000,000	6.093
RALS	2018	Rp	10,076,320,000,000	Rp	1,415,582,000,000	7.118
RALS	2019	Rp	7,557,240,000,000	Rp	1,480,893,000,000	5.103
RALS	2020	Rp	5,499,400,000,000	Rp	1,566,474,000,000	3.511
RANC	2016	Rp	829,178,375,000	Rp	290,120,012,213	2.858
RANC	2017	Rp	516,280,875,000	Rp	343,417,617,476	1.503
RANC	2018	Rp	491,249,075,000	Rp	399,959,714,997	1.228
RANC	2019	Rp	522,538,825,000	Rp	404,693,066,101	1.291
RANC	2020	Rp	682,116,550,000	Rp	774,629,825,055	0.881
SONA	2016	Rp	834,624,000,000	Rp	446,585,300,387	1.869
SONA	2017	Rp	761,760,000,000	Rp	504,553,387,288	1.510
SONA	2018	Rp	1,887,840,000,000	Rp	488,710,639,868	3.863
SONA	2019	Rp	1,978,920,000,000	Rp	277,278,528,644	7.137
SONA	2020	Rp	1,987,200,000,000	Rp	150,391,014,535	13.214
TELE	2016	Rp	6,250,844,627,595	Rp	5,010,118,000,000	1.248
TELE	2017	Rp	7,055,046,860,385	Rp	5,206,421,000,000	1.355
TELE	2018	Rp	6,872,273,625,660	Rp	4,450,448,000,000	1.544
TELE	2019	Rp	2,193,278,816,700	Rp	4,602,040,000,000	0.477
TELE	2020	Rp	884,622,456,069	Rp	4,472,512,000,000	0.198
TRIO	2016	Rp	9,523,000,000,000	Rp	7,239,342,302,111	1.315
TRIO	2017	Rp	52,014,989,290,000	Rp	3,835,805,598,909	13.560
TRIO	2018	Rp	6,137,768,736,220	Rp	3,778,624,428,097	1.624
TRIO	2019	Rp	11,079,192,718,770	Rp	3,836,514,312,689	2.888
TRIO	2020	Rp	11,079,192,718,770	Rp	4,084,070,381,509	2.713

X5

PERUSAHAAN	TAHUN	$SATA = \frac{Sales}{Total Asset}$		SATA
		SALES	TOTAL ASET	
ACES	2016	Rp 4,884,064,456,253	Rp 3,731,101,667,891	1.309
ACES	2017	Rp 5,877,966,660,390	Rp 4,428,840,550,479	1.327
ACES	2018	Rp 7,124,230,646,381	Rp 5,321,180,855,541	1.339
ACES	2019	Rp 7,986,528,789,676	Rp 6,641,808,005,145	1.202
ACES	2020	Rp 7,275,828,758,719	Rp 7,247,063,894,294	1.004
AMRT	2016	Rp 56,107,056,000,000	Rp 19,474,367,000,000	2.881
AMRT	2017	Rp 61,464,903,000,000	Rp 21,901,740,000,000	2.806
AMRT	2018	Rp 66,817,305,000,000	Rp 22,165,988,000,000	3.014
AMRT	2019	Rp 72,944,988,000,000	Rp 23,992,313,000,000	3.040
AMRT	2020	Rp 75,826,880,000,000	Rp 25,970,743,000,000	2.920
CENT	2016	Rp 140,668,401,759	Rp 1,314,929,550,049	0.107
CENT	2017	Rp 707,974,000,000	Rp 4,494,835,000,000	0.158
CENT	2018	Rp 801,161,000,000	Rp 5,207,342,000,000	0.154
CENT	2019	Rp 831,777,000,000	Rp 5,729,085,000,000	0.145
CENT	2020	Rp 1,096,044,000,000	Rp 7,629,153,000,000	0.144
CSAP	2016	Rp 7,726,465,694,000	Rp 4,240,820,320,000	1.822
CSAP	2017	Rp 9,288,124,716,000	Rp 5,138,259,285,000	1.808
CSAP	2018	Rp 10,408,153,798,000	Rp 5,785,287,553,000	1.799
CSAP	2019	Rp 11,485,127,430,000	Rp 6,584,587,023,000	1.744
CSAP	2020	Rp 12,012,082,461,000	Rp 7,616,266,096,000	1.577
DAYA	2016	Rp 237,500,392,000	Rp 199,332,019,000	1.191
DAYA	2017	Rp 363,682,824,000	Rp 275,708,556,000	1.319
DAYA	2018	Rp 547,324,968,000	Rp 411,861,480,000	1.329
DAYA	2019	Rp 1,094,836,588,000	Rp 730,497,952,000	1.499
DAYA	2020	Rp 886,244,543,000	Rp 708,530,092,000	1.251
ECII	2016	Rp 1,659,849,583,812	Rp 1,881,645,933,066	0.882
ECII	2017	Rp 1,818,471,209,910	Rp 1,717,972,026,282	1.058
ECII	2018	Rp 2,003,208,506,432	Rp 1,751,622,687,179	1.144
ECII	2019	Rp 1,978,631,967,708	Rp 1,845,324,374,750	1.072
ECII	2020	Rp 1,618,490,505,399	Rp 1,730,596,456,562	0.935
ERAA	2016	Rp 20,547,128,076,480	Rp 7,424,604,403,847	2.767
ERAA	2017	Rp 24,229,915,014,000	Rp 8,873,955,770,000	2.730
ERAA	2018	Rp 34,744,177,481,000	Rp 12,682,902,626,000	2.739
ERAA	2019	Rp 32,944,902,671,000	Rp 9,747,703,198,000	3.380
ERAA	2020	Rp 34,113,454,845,000	Rp 11,211,369,042,000	3.043
GLOB	2016	Rp 562,959,661,885	Rp 74,599,266,089	7.546
GLOB	2017	Rp 621,534,450,144	Rp 60,812,090,345	10.221

GLOB	2018	Rp	514,434,171,115	Rp	37,180,128,513	13.836
GLOB	2019	Rp	238,615,469,362	Rp	8,278,414,392	28.824
GLOB	2020	Rp	30,671,505,593	Rp	10,616,363,611	2.889
HERO	2016	Rp	13,677,931,000,000	Rp	7,487,033,000,000	1.827
HERO	2017	Rp	13,033,638,000,000	Rp	7,363,144,000,000	1.770
HERO	2018	Rp	12,970,389,000,000	Rp	6,154,748,000,000	2.107
HERO	2019	Rp	12,181,025,000,000	Rp	6,054,384,000,000	2.012
HERO	2020	Rp	8,893,785,000,000	Rp	4,838,417,000,000	1.838
KOIN	2016	Rp	1,448,167,445,096	Rp	708,069,212,062	2.045
KOIN	2017	Rp	1,605,317,945,521	Rp	743,789,368,008	2.158
KOIN	2018	Rp	1,750,649,236,912	Rp	855,572,807,455	2.046
KOIN	2019	Rp	1,618,048,001,660	Rp	652,346,214,673	2.480
KOIN	2020	Rp	1,446,474,839,632	Rp	675,863,759,206	2.140
LPPF	2016	Rp	9,897,046,000,000	Rp	4,858,878,000,000	2.037
LPPF	2017	Rp	10,023,961,000,000	Rp	5,427,426,000,000	1.847
LPPF	2018	Rp	10,245,173,000,000	Rp	5,036,396,000,000	2.034
LPPF	2019	Rp	10,276,431,000,000	Rp	4,832,910,000,000	2.126
LPPF	2020	Rp	4,839,058,000,000	Rp	6,319,074,000,000	0.766
MAPI	2016	Rp	14,149,615,423,000	Rp	10,683,437,788,000	1.324
MAPI	2017	Rp	16,305,733,000,000	Rp	11,425,390,000,000	1.427
MAPI	2018	Rp	18,921,123,000,000	Rp	12,632,671,000,000	1.498
MAPI	2019	Rp	21,637,309,000,000	Rp	13,937,115,000,000	1.552
MAPI	2020	Rp	14,847,398,000,000	Rp	17,650,451,000,000	0.841
MIDI	2016	Rp	8,493,119,000,000	Rp	4,261,283,000,000	1.993
MIDI	2017	Rp	9,767,592,000,000	Rp	4,878,115,000,000	2.002
MIDI	2018	Rp	10,701,575,000,000	Rp	4,960,145,000,000	2.158
MIDI	2019	Rp	11,625,313,000,000	Rp	4,990,309,000,000	2.330
MIDI	2020	Rp	12,659,705,000,000	Rp	5,923,693,000,000	2.137
MKNT	2016	Rp	270,902,801,566	Rp	157,848,592,051	1.716
MKNT	2017	Rp	6,334,113,649,170	Rp	968,128,268,255	6.543
MKNT	2018	Rp	4,748,403,735,514	Rp	855,096,628,586	5.553
MKNT	2019	Rp	4,294,709,675,286	Rp	741,824,867,681	5.789
MKNT	2020	Rp	3,452,545,403,628	Rp	500,766,702,549	6.895
MPPA	2016	Rp	13,527,323,000,000	Rp	6,701,734,000,000	2.018
MPPA	2017	Rp	12,562,780,000,000	Rp	5,427,059,000,000	2.315
MPPA	2018	Rp	10,692,363,000,000	Rp	4,808,545,000,000	2.224
MPPA	2019	Rp	8,654,646,000,000	Rp	3,820,809,000,000	2.265
MPPA	2020	Rp	6,746,594,000,000	Rp	4,510,511,000,000	1.496
RALS	2016	Rp	5,857,037,000,000	Rp	4,647,009,000,000	1.260
RALS	2017	Rp	5,622,728,000,000	Rp	4,891,922,000,000	1.149
RALS	2018	Rp	5,739,553,000,000	Rp	5,243,047,000,000	1.095
RALS	2019	Rp	5,596,398,000,000	Rp	5,649,823,000,000	0.991
RALS	2020	Rp	2,527,951,000,000	Rp	5,285,218,000,000	0.478
RANC	2016	Rp	2,063,982,006,646	Rp	721,237,977,450	2.862
RANC	2017	Rp	2,189,573,735,873	Rp	804,020,324,861	2.723

RANC	2018	Rp	2,355,625,271,907	Rp	904,003,739,438	2.606
RANC	2019	Rp	2,397,792,415,330	Rp	952,496,300,846	2.517
RANC	2020	Rp	3,011,422,750,334	Rp	1,319,134,443,995	2.283
SONA	2016	Rp	1,429,794,539,022	Rp	1,031,213,478,568	1.387
SONA	2017	Rp	1,582,767,220,537	Rp	1,141,551,052,237	1.387
SONA	2018	Rp	1,977,016,177,884	Rp	1,250,810,082,430	1.581
SONA	2019	Rp	1,748,819,551,691	Rp	1,110,366,038,014	1.575
SONA	2020	Rp	245,551,577,771	Rp	853,905,287,718	0.288
TELE	2016	Rp	27,310,057,000,000	Rp	8,215,481,000,000	3.324
TELE	2017	Rp	27,914,330,000,000	Rp	8,749,797,000,000	3.190
TELE	2018	Rp	29,343,068,000,000	Rp	8,339,085,000,000	3.519
TELE	2019	Rp	28,442,132,000,000	Rp	2,956,614,000,000	9.620
TELE	2020	Rp	4,206,839,000,000	Rp	325,450,000,000	12.926
TRIO	2016	Rp	1,717,579,307,635	Rp	430,032,185,417	3.994
TRIO	2017	Rp	2,028,659,770,454	Rp	267,494,791,082	7.584
TRIO	2018	Rp	1,671,866,232,277	Rp	193,663,107,384	8.633
TRIO	2019	Rp	966,725,371,267	Rp	136,433,406,842	7.086
TRIO	2020	Rp	494,469,692,213	Rp	111,295,495,695	4.443

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PERUSAHAAN	TAHUN	WCTA = $\frac{\text{Current Asset} - \text{Current Liability}}{\text{Total Aset}}$			WCTA
		CURRENT ASET	CURRENT LIABILITY	TOTAL ASET	
ACES	2016	Rp2,822,069,744,478	Rp388,653,022,672	Rp3,731,101,667,891	0.65
ACES	2017	Rp3,358,272,302,312	Rp478,208,556,747	Rp4,428,840,550,479	0.65
ACES	2018	Rp4,096,280,475,383	Rp631,055,459,387	Rp5,321,180,855,541	0.65
ACES	2019	Rp4,369,550,647,718	Rp783,375,432,849	Rp6,641,808,005,145	0.54
ACES	2020	Rp5,034,737,166,320	Rp844,928,054,206	Rp7,247,063,894,294	0.58
AMRT	2016	Rp10,232,917,000,000	Rp11,420,080,000,000	Rp19,474,367,000,000	(0.06)
AMRT	2017	Rp11,544,190,000,000	Rp13,055,903,000,000	Rp21,901,740,000,000	(0.07)
AMRT	2018	Rp12,791,052,000,000	Rp11,126,956,000,000	Rp22,165,988,000,000	0.08
AMRT	2019	Rp14,782,817,000,000	Rp13,167,601,000,000	Rp23,992,313,000,000	0.07
AMRT	2020	Rp13,558,536,000,000	Rp15,326,139,000,000	Rp25,970,743,000,000	(0.07)
CENT	2016	Rp214,293,129,498	Rp149,005,855,074	Rp1,314,929,550,049	0.05
CENT	2017	Rp765,449,000,000	Rp737,171,000,000	Rp4,494,835,000,000	0.01
CENT	2018	Rp940,154,000,000	Rp778,970,000,000	Rp5,207,342,000,000	0.03
CENT	2019	Rp1,285,023,000,000	Rp1,255,977,000,000	Rp5,729,085,000,000	0.01
CENT	2020	Rp1,116,644,000,000	Rp4,983,388,000,000	Rp7,629,153,000,000	(0.51)
CSAP	2016	Rp3,134,576,683,000	Rp2,492,613,396,000	Rp4,240,820,320,000	0.15
CSAP	2017	Rp3,662,499,520,000	Rp3,159,792,330,000	Rp5,138,259,285,000	0.10

CSAP	2018	Rp4,086,694,094,000	Rp3,302,706,214,000	Rp5,785,287,553,000	0.14
CSAP	2019	Rp4,502,446,283,000	Rp3,956,848,238,000	Rp6,584,587,023,000	0.08
CSAP	2020	Rp4,419,656,047,000	Rp4,060,960,933,000	Rp7,616,266,096,000	0.05
DAYA	2016	Rp137,984,014,000	Rp83,890,411,000	Rp199,332,019,000	0.27
DAYA	2017	Rp189,712,241,000	Rp121,112,835,000	Rp275,708,556,000	0.25
DAYA	2018	Rp287,204,854,000	Rp238,168,553,000	Rp411,861,480,000	0.12
DAYA	2019	Rp321,475,087,000	Rp411,740,929,000	Rp730,497,952,000	(0.12)
DAYA	2020	Rp314,742,151,000	Rp460,174,368,000	Rp708,530,092,000	(0.21)
ECII	2016	Rp1,250,758,287,498	Rp121,582,650,793	Rp1,881,645,933,066	0.60
ECII	2017	Rp786,009,494,559	Rp336,414,143,769	Rp1,717,972,026,282	0.26
ECII	2018	Rp752,676,010,865	Rp353,191,107,837	Rp1,751,622,687,179	0.23
ECII	2019	Rp831,937,034,323	Rp399,844,207,730	Rp1,845,324,374,750	0.23
ECII	2020	Rp953,327,437,749	Rp397,514,035,472	Rp1,730,596,456,562	0.32
ERAA	2016	Rp5,168,222,743,605	Rp3,935,217,294,429	Rp7,424,604,403,847	0.17
ERAA	2017	Rp6,684,618,036,000	Rp5,048,800,299,000	Rp8,873,955,770,000	0.18
ERAA	2018	Rp10,053,691,913,000	Rp7,740,591,920,000	Rp12,682,902,626,000	0.18
ERAA	2019	Rp6,944,525,743,000	Rp4,615,531,135,000	Rp9,747,703,198,000	0.24
ERAA	2020	Rp7,546,995,255,000	Rp5,142,950,705,000	Rp11,211,369,042,000	0.21
GLOB	2016	Rp40,903,659,907	Rp257,403,914,084	Rp74,599,266,089	(2.90)
GLOB	2017	Rp32,500,867,639	Rp247,283,351,333	Rp60,812,090,345	(3.53)
GLOB	2018	Rp22,136,300,869	Rp258,420,563,998	Rp37,180,128,513	(6.36)
GLOB	2019	Rp6,415,449,405	Rp300,809,467,631	Rp8,278,414,392	(35.56)
GLOB	2020	Rp8,968,497,949	Rp408,738,803,147	Rp10,616,363,611	(37.66)
HERO	2016	Rp2,817,240,000,000	Rp1,970,941,000,000	Rp7,487,033,000,000	0.11
HERO	2017	Rp2,544,725,000,000	Rp2,001,461,000,000	Rp7,363,144,000,000	0.07
HERO	2018	Rp2,845,304,000,000	Rp2,174,008,000,000	Rp6,154,748,000,000	0.11
HERO	2019	Rp2,417,001,000,000	Rp2,038,174,000,000	Rp6,054,384,000,000	0.06
HERO	2020	Rp1,540,143,000,000	Rp2,278,042,000,000	Rp4,838,417,000,000	(0.15)
KOIN	2016	Rp652,906,785,206	Rp562,685,685,627	Rp708,069,212,062	0.13
KOIN	2017	Rp700,601,436,035	Rp609,522,247,224	Rp743,789,368,008	0.12
KOIN	2018	Rp803,042,816,102	Rp734,503,822,439	Rp855,572,807,455	0.08
KOIN	2019	Rp592,578,908,193	Rp553,865,665,830	Rp652,346,214,673	0.06
KOIN	2020	Rp606,903,824,102	Rp529,614,198,284	Rp675,863,759,206	0.11
LPPF	2016	Rp2,974,052,000,000	Rp2,588,354,000,000	Rp4,858,878,000,000	0.08
LPPF	2017	Rp2,973,749,000,000	Rp2,610,824,000,000	Rp5,427,426,000,000	0.07
LPPF	2018	Rp3,014,408,000,000	Rp2,739,811,000,000	Rp5,036,396,000,000	0.05
LPPF	2019	Rp2,748,781,000,000	Rp2,597,839,000,000	Rp4,832,910,000,000	0.03
LPPF	2020	Rp1,610,213,000,000	Rp2,856,300,000,000	Rp6,319,074,000,000	(0.20)
MAPI	2016	Rp6,616,255,899,000	Rp4,181,304,246,000	Rp10,683,437,788,000	0.23
MAPI	2017	Rp6,798,523,000,000	Rp4,564,695,000,000	Rp11,425,390,000,000	0.20
MAPI	2018	Rp7,312,798,000,000	Rp5,418,884,000,000	Rp12,632,671,000,000	0.15
MAPI	2019	Rp8,160,173,000,000	Rp5,673,585,000,000	Rp13,937,115,000,000	0.18
MAPI	2020	Rp8,165,336,000,000	Rp7,344,835,000,000	Rp17,650,451,000,000	0.05
MIDI	2016	Rp1,720,167,000,000	Rp2,245,119,000,000	Rp4,261,283,000,000	(0.12)
MIDI	2017	Rp1,970,840,000,000	Rp2,732,215,000,000	Rp4,878,115,000,000	(0.16)

MIDI	2018	Rp2,174,526,000,000	Rp2,959,873,000,000	Rp4,960,145,000,000	(0.16)
MIDI	2019	Rp2,255,382,000,000	Rp2,898,464,000,000	Rp4,990,309,000,000	(0.13)
MIDI	2020	Rp2,205,519,000,000	Rp3,395,618,000,000	Rp5,923,693,000,000	(0.20)
MKNT	2016	Rp149,728,404,901	Rp23,886,859,650	Rp157,848,592,051	0.80
MKNT	2017	Rp863,412,945,202	Rp665,248,549,440	Rp968,128,268,255	0.20
MKNT	2018	Rp761,294,934,968	Rp558,243,039,723	Rp855,096,628,586	0.24
MKNT	2019	Rp709,841,405,850	Rp171,710,454,969	Rp741,824,867,681	0.73
MKNT	2020	Rp487,165,020,354	Rp131,704,896,918	Rp500,766,702,549	0.71
MPPA	2016	Rp4,102,458,000,000	Rp3,333,880,000,000	Rp6,701,734,000,000	0.11
MPPA	2017	Rp2,485,833,000,000	Rp3,876,194,000,000	Rp5,427,059,000,000	(0.26)
MPPA	2018	Rp2,472,849,000,000	Rp2,887,516,000,000	Rp4,808,545,000,000	(0.09)
MPPA	2019	Rp1,904,047,000,000	Rp2,618,390,000,000	Rp3,820,809,000,000	(0.19)
MPPA	2020	Rp1,535,266,000,000	Rp2,763,099,000,000	Rp4,510,511,000,000	(0.27)
RALS	2016	Rp2,830,815,000,000	Rp1,008,981,000,000	Rp4,647,009,000,000	0.39
RALS	2017	Rp3,093,496,000,000	Rp1,048,640,000,000	Rp4,891,922,000,000	0.42
RALS	2018	Rp3,557,488,000,000	Rp1,093,095,000,000	Rp5,243,047,000,000	0.47
RALS	2019	Rp4,017,659,000,000	Rp1,135,638,000,000	Rp5,649,823,000,000	0.51
RALS	2020	Rp3,200,854,000,000	Rp925,658,000,000	Rp5,285,218,000,000	0.43
RANC	2016	Rp405,493,726,841	Rp254,396,030,475	Rp721,237,977,450	0.21
RANC	2017	Rp483,421,701,709	Rp302,213,795,172	Rp804,020,324,861	0.23
RANC	2018	Rp544,178,319,988	Rp348,666,837,381	Rp904,003,739,438	0.22
RANC	2019	Rp589,611,662,008	Rp348,625,244,359	Rp952,496,300,846	0.25
RANC	2020	Rp625,866,677,394	Rp512,965,592,357	Rp1,319,134,443,995	0.09
SONA	2016	Rp726,322,485,853	Rp446,585,300,387	Rp1,031,213,478,568	0.27
SONA	2017	Rp828,525,701,589	Rp504,553,387,288	Rp1,141,551,052,237	0.28
SONA	2018	Rp998,371,024,853	Rp488,710,639,868	Rp1,250,810,082,430	0.41
SONA	2019	Rp902,827,833,509	Rp277,278,528,644	Rp1,110,366,038,014	0.56
SONA	2020	Rp732,256,750,960	Rp150,391,014,535	Rp853,905,287,718	0.68
TELE	2016	Rp7,472,601,000,000	Rp1,247,690,000,000	Rp8,215,481,000,000	0.76
TELE	2017	Rp8,025,250,000,000	Rp2,068,709,000,000	Rp8,749,797,000,000	0.68
TELE	2018	Rp7,609,754,000,000	Rp1,466,633,000,000	Rp8,339,085,000,000	0.74
TELE	2019	Rp1,229,572,000,000	Rp3,911,088,000,000	Rp2,956,614,000,000	(0.91)
TELE	2020	Rp185,898,000,000	Rp3,949,979,000,000	Rp325,450,000,000	(11.57)
TRIO	2016	Rp228,937,342,571	Rp4,204,061,085,053	Rp430,032,185,417	(9.24)
TRIO	2017	Rp174,277,930,855	Rp670,486,781,041	Rp267,494,791,082	(1.86)
TRIO	2018	Rp128,387,536,230	Rp829,311,833,210	Rp193,663,107,384	(3.62)
TRIO	2019	Rp102,911,590,387	Rp809,331,977,134	Rp136,433,406,842	(5.18)
TRIO	2020	Rp70,185,025,171	Rp972,203,816,034	Rp111,295,495,695	(8.10)

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PERUSAHAAN	TAHUN	$EBITTA = \frac{\text{Earning Before Interest And Taxes}}{\text{Total Aset}}$		EBITA
		EBIT	TOTAL ASET	
ACES	2016	Rp 863,127,561,485	Rp 3,731,101,667,891	0.231
ACES	2017	Rp 959,980,347,383	Rp 4,428,840,550,479	0.217
ACES	2018	Rp 1,202,709,103,365	Rp 5,321,180,855,541	0.226
ACES	2019	Rp 1,262,709,647,429	Rp 6,641,808,005,145	0.190
ACES	2020	Rp 923,335,768,686	Rp 7,247,063,894,294	0.127
AMRT	2016	Rp 681,896,000,000	Rp 19,474,367,000,000	0.035
AMRT	2017	Rp 381,342,000,000	Rp 21,901,740,000,000	0.017
AMRT	2018	Rp 867,131,000,000	Rp 22,165,988,000,000	0.039
AMRT	2019	Rp 1,414,137,000,000	Rp 23,992,313,000,000	0.059
AMRT	2020	Rp 1,352,466,000,000	Rp 25,970,743,000,000	0.052
CENT	2016	-Rp 31,576,229,003	Rp 1,314,929,550,049	-0.024
CENT	2017	-Rp 113,484,000,000	Rp 4,494,835,000,000	-0.025
CENT	2018	Rp 21,571,000,000	Rp 5,207,342,000,000	0.004
CENT	2019	Rp 43,473,000,000	Rp 5,729,085,000,000	0.008
CENT	2020	-Rp 476,417,000,000	Rp 7,629,153,000,000	-0.062
CSAP	2016	Rp 100,896,941,000	Rp 4,240,820,320,000	0.024
CSAP	2017	Rp 115,130,429,000	Rp 5,138,259,285,000	0.022
CSAP	2018	Rp 131,939,083,000	Rp 5,785,287,553,000	0.023
CSAP	2019	Rp 105,046,392,000	Rp 6,584,587,023,000	0.016
CSAP	2020	Rp 114,757,297,000	Rp 7,616,266,096,000	0.015
DAYA	2016	-Rp 23,586,266,000	Rp 199,332,019,000	-0.118
DAYA	2017	-Rp 3,725,989,000	Rp 275,708,556,000	-0.014
DAYA	2018	Rp 2,448,671,000	Rp 411,861,480,000	0.006
DAYA	2019	Rp 12,645,238,000	Rp 730,497,952,000	0.017
DAYA	2020	-Rp 45,983,478,000	Rp 708,530,092,000	-0.065
ECII	2016	-Rp 33,741,336,231	Rp 1,881,645,933,066	-0.018
ECII	2017	-Rp 5,806,442,290	Rp 1,717,972,026,282	-0.003
ECII	2018	Rp 7,082,402,298	Rp 1,751,622,687,179	0.004
ECII	2019	Rp 31,921,633,688	Rp 1,845,324,374,750	0.017
ECII	2020	-Rp 16,619,896,032	Rp 1,730,596,456,562	-0.010
ERAA	2016	Rp 383,536,614,051	Rp 7,424,604,403,847	0.052
ERAA	2017	Rp 479,656,198,000	Rp 8,873,955,770,000	0.054
ERAA	2018	Rp 1,203,140,844,000	Rp 12,682,902,626,000	0.095
ERAA	2019	Rp 472,719,996,000	Rp 9,747,703,198,000	0.048
ERAA	2020	Rp 917,316,742,000	Rp 11,211,369,042,000	0.082
GLOB	2016	-Rp 120,038,363,955	Rp 74,599,266,089	-1.609
GLOB	2017	-Rp 12,605,133,764	Rp 60,812,090,345	-0.207
GLOB	2018	-Rp 21,050,797,268	Rp 37,180,128,513	-0.566
GLOB	2019	-Rp 37,297,602,565	Rp 8,278,414,392	-4.505
GLOB	2020	-Rp 50,662,749,679	Rp 10,616,363,611	-4.772

HERO	2016	Rp	184,449,000,000	Rp	7,487,033,000,000	0.025
HERO	2017	-Rp	251,647,000,000	Rp	7,363,144,000,000	-0.034
HERO	2018	-Rp	1,252,995,000,000	Rp	6,154,748,000,000	-0.204
HERO	2019	Rp	55,728,000,000	Rp	6,054,384,000,000	0.009
HERO	2020	-Rp	1,027,133,000,000	Rp	4,838,417,000,000	-0.212
KOIN	2016	Rp	130,368,081	Rp	708,069,212,062	0.000
KOIN	2017	-Rp	7,244,550,782	Rp	743,789,368,008	-0.010
KOIN	2018	-Rp	8,325,461,068	Rp	855,572,807,455	-0.010
KOIN	2019	-Rp	15,480,984,182	Rp	652,346,214,673	-0.024
KOIN	2020	Rp	52,764,018,688	Rp	675,863,759,206	0.078
LPPF	2016	Rp	2,532,666,000,000	Rp	4,858,878,000,000	0.521
LPPF	2017	Rp	2,396,300,000,000	Rp	5,427,426,000,000	0.442
LPPF	2018	Rp	1,575,321,000,000	Rp	5,036,396,000,000	0.313
LPPF	2019	Rp	1,763,009,000,000	Rp	4,832,910,000,000	0.365
LPPF	2020	-Rp	934,404,000,000	Rp	6,319,074,000,000	-0.148
MAPI	2016	Rp	401,490,328,000	Rp	10,683,437,788,000	0.038
MAPI	2017	Rp	597,451,000,000	Rp	11,425,390,000,000	0.052
MAPI	2018	Rp	1,173,417,000,000	Rp	12,632,671,000,000	0.093
MAPI	2019	Rp	1,625,502,000,000	Rp	13,937,115,000,000	0.117
MAPI	2020	-Rp	723,806,000,000	Rp	17,650,451,000,000	-0.041
MIDI	2016	Rp	248,497,000,000	Rp	4,261,283,000,000	0.058
MIDI	2017	Rp	123,249,000,000	Rp	4,878,115,000,000	0.025
MIDI	2018	Rp	197,098,000,000	Rp	4,960,145,000,000	0.040
MIDI	2019	Rp	270,473,000,000	Rp	4,990,309,000,000	0.054
MIDI	2020	Rp	261,024,000,000	Rp	5,923,693,000,000	0.044
MKNT	2016	Rp	3,413,803,149	Rp	157,848,592,051	0.022
MKNT	2017	Rp	51,456,169,951	Rp	968,128,268,255	0.053
MKNT	2018	Rp	9,823,131,713	Rp	855,096,628,586	0.011
MKNT	2019	-Rp	114,292,275,998	Rp	741,824,867,681	-0.154
MKNT	2020	-Rp	55,495,245,361	Rp	500,766,702,549	-0.111
MPPA	2016	Rp	101,112,000,000	Rp	6,701,734,000,000	0.015
MPPA	2017	-Rp	1,669,614,000,000	Rp	5,427,059,000,000	-0.308
MPPA	2018	-Rp	1,070,666,000,000	Rp	4,808,545,000,000	-0.223
MPPA	2019	-Rp	314,601,000,000	Rp	3,820,809,000,000	-0.082
MPPA	2020	-Rp	407,687,000,000	Rp	4,510,511,000,000	-0.090
RALS	2016	Rp	465,065,000,000	Rp	4,647,009,000,000	0.100
RALS	2017	Rp	466,592,000,000	Rp	4,891,922,000,000	0.095
RALS	2018	Rp	717,172,000,000	Rp	5,243,047,000,000	0.137
RALS	2019	Rp	733,161,000,000	Rp	5,649,823,000,000	0.130
RALS	2020	Rp	181,445,000,000	Rp	5,285,218,000,000	0.034
RANC	2016	Rp	49,707,851,202	Rp	721,237,977,450	0.069
RANC	2017	Rp	47,109,826,388	Rp	804,020,324,861	0.059
RANC	2018	Rp	59,877,255,323	Rp	904,003,739,438	0.066
RANC	2019	Rp	64,038,406,949	Rp	952,496,300,846	0.067
RANC	2020	Rp	94,284,369,099	Rp	1,319,134,443,995	0.071

SONA	2016	-Rp	5,503,061,803	Rp	1,031,213,478,568	-0.005
SONA	2017	Rp	69,184,005,689	Rp	1,141,551,052,237	0.061
SONA	2018	Rp	162,897,913,618	Rp	1,250,810,082,430	0.130
SONA	2019	Rp	104,353,775,859	Rp	1,110,366,038,014	0.094
SONA	2020	-Rp	170,065,963,842	Rp	853,905,287,718	-0.199
TELE	2016	Rp	634,448,000,000	Rp	8,215,481,000,000	0.077
TELE	2017	Rp	561,247,000,000	Rp	8,749,797,000,000	0.064
TELE	2018	Rp	610,241,000,000	Rp	8,339,085,000,000	0.073
TELE	2019	-Rp	7,065,747,000,000	Rp	2,956,614,000,000	-2.390
TELE	2020	-Rp	1,063,160,000,000	Rp	325,450,000,000	-3.267
TRIO	2016	-Rp	434,721,028,687	Rp	430,032,185,417	-1.011
TRIO	2017	-Rp	124,815,870,429	Rp	267,494,791,082	-0.467
TRIO	2018	-Rp	12,273,399,044	Rp	193,663,107,384	-0.063
TRIO	2019	-Rp	101,986,961,830	Rp	136,433,406,842	-0.748
TRIO	2020	-Rp	277,923,559,679	Rp	111,295,495,695	-2.497

X3

PERUSAHAAN	TAHUN	$EBTCL = \frac{\text{Earning before taxes}}{\text{Current Liabilities}}$		EBTCL
		EBIT	CURRENT LIABILITY	
ACES	2016	Rp 863,127,561,485	Rp 388,653,022,672	2.221
ACES	2017	Rp 959,980,347,383	Rp 478,208,556,747	2.007
ACES	2018	Rp 1,202,709,103,365	Rp 631,055,459,387	1.906
ACES	2019	Rp 1,262,709,647,429	Rp 783,375,432,849	1.612
ACES	2020	Rp 923,335,768,686	Rp 844,928,054,206	1.093
AMRT	2016	Rp 681,896,000,000	Rp 11,420,080,000,000	0.060
AMRT	2017	Rp 381,342,000,000	Rp 13,055,903,000,000	0.029
AMRT	2018	Rp 867,131,000,000	Rp 11,126,956,000,000	0.078
AMRT	2019	Rp 1,414,137,000,000	Rp 13,167,601,000,000	0.107
AMRT	2020	Rp 1,352,466,000,000	Rp 15,326,139,000,000	0.088
CENT	2016	-Rp 31,576,229,003	Rp 149,005,855,074	-0.212
CENT	2017	-Rp 113,484,000,000	Rp 737,171,000,000	-0.154
CENT	2018	Rp 21,571,000,000	Rp 778,970,000,000	0.028
CENT	2019	Rp 43,473,000,000	Rp 1,255,977,000,000	0.035
CENT	2020	-Rp 476,417,000,000	Rp 4,983,388,000,000	-0.096
CSAP	2016	Rp 100,896,941,000	Rp 2,492,613,396,000	0.040
CSAP	2017	Rp 115,130,429,000	Rp 3,159,792,330,000	0.036
CSAP	2018	Rp 131,939,083,000	Rp 3,302,706,214,000	0.040
CSAP	2019	Rp 105,046,392,000	Rp 3,956,848,238,000	0.027
CSAP	2020	Rp 114,757,297,000	Rp 4,060,960,933,000	0.028
DAYA	2016	-Rp 23,586,266,000	Rp 83,890,411,000	-0.281
DAYA	2017	-Rp 3,725,989,000	Rp 121,112,835,000	-0.031
DAYA	2018	Rp 2,448,671,000	Rp 238,168,553,000	0.010
DAYA	2019	Rp 12,645,238,000	Rp 411,740,929,000	0.031

DAYA	2020	-Rp	45,983,478,000	Rp	460,174,368,000	-0.100
ECII	2016	-Rp	33,741,336,231	Rp	121,582,650,793	-0.278
ECII	2017	-Rp	5,806,442,290	Rp	336,414,143,769	-0.017
ECII	2018	Rp	7,082,402,298	Rp	353,191,107,837	0.020
ECII	2019	Rp	31,921,633,688	Rp	399,844,207,730	0.080
ECII	2020	-Rp	16,619,896,032	Rp	397,514,035,472	-0.042
ERAA	2016	Rp	383,536,614,051	Rp	3,935,217,294,429	0.097
ERAA	2017	Rp	479,656,198,000	Rp	5,048,800,299,000	0.095
ERAA	2018	Rp	1,203,140,844,000	Rp	7,740,591,920,000	0.155
ERAA	2019	Rp	472,719,996,000	Rp	4,615,531,135,000	0.102
ERAA	2020	Rp	917,316,742,000	Rp	5,142,950,705,000	0.178
GLOB	2016	-Rp	120,038,363,955	Rp	257,403,914,084	-0.466
GLOB	2017	-Rp	12,605,133,764	Rp	247,283,351,333	-0.051
GLOB	2018	-Rp	21,050,797,268	Rp	258,420,563,998	-0.081
GLOB	2019	-Rp	37,297,602,565	Rp	300,809,467,631	-0.124
GLOB	2020	-Rp	50,662,749,679	Rp	408,738,803,147	-0.124
HERO	2016	Rp	184,449,000,000	Rp	1,970,941,000,000	0.094
HERO	2017	-Rp	251,647,000,000	Rp	2,001,461,000,000	-0.126
HERO	2018	-Rp	1,252,995,000,000	Rp	2,174,008,000,000	-0.576
HERO	2019	Rp	55,728,000,000	Rp	2,038,174,000,000	0.027
HERO	2020	-Rp	1,027,133,000,000	Rp	2,278,042,000,000	-0.451
KOIN	2016	Rp	130,368,081	Rp	562,685,685,627	0.000
KOIN	2017	-Rp	7,244,550,782	Rp	609,522,247,224	-0.012
KOIN	2018	-Rp	8,325,461,068	Rp	734,503,822,439	-0.011
KOIN	2019	-Rp	15,480,984,182	Rp	553,865,665,830	-0.028
KOIN	2020	Rp	52,764,018,688	Rp	529,614,198,284	0.100
LPPF	2016	Rp	2,532,666,000,000	Rp	2,588,354,000,000	0.978
LPPF	2017	Rp	2,396,300,000,000	Rp	2,610,824,000,000	0.918
LPPF	2018	Rp	1,575,321,000,000	Rp	2,739,811,000,000	0.575
LPPF	2019	Rp	1,763,009,000,000	Rp	2,597,839,000,000	0.679
LPPF	2020	-Rp	934,404,000,000	Rp	2,856,300,000,000	-0.327
MAPI	2016	Rp	401,490,328,000	Rp	4,181,304,246,000	0.096
MAPI	2017	Rp	597,451,000,000	Rp	4,564,695,000,000	0.131
MAPI	2018	Rp	1,173,417,000,000	Rp	5,418,884,000,000	0.217
MAPI	2019	Rp	1,625,502,000,000	Rp	5,673,585,000,000	0.287
MAPI	2020	-Rp	723,806,000,000	Rp	7,344,835,000,000	-0.099
MIDI	2016	Rp	248,497,000,000	Rp	2,245,119,000,000	0.111
MIDI	2017	Rp	123,249,000,000	Rp	2,732,215,000,000	0.045
MIDI	2018	Rp	197,098,000,000	Rp	2,959,873,000,000	0.067
MIDI	2019	Rp	270,473,000,000	Rp	2,898,464,000,000	0.093
MIDI	2020	Rp	261,024,000,000	Rp	3,395,618,000,000	0.077
MKNT	2016	Rp	3,413,803,149	Rp	23,886,859,650	0.143
MKNT	2017	Rp	51,456,169,951	Rp	665,248,549,440	0.077
MKNT	2018	Rp	9,823,131,713	Rp	558,243,039,723	0.018
MKNT	2019	-Rp	114,292,275,998	Rp	171,710,454,969	-0.666

MKNT	2020	-Rp	55,495,245,361	Rp	131,704,896,918	-0.421
MPPA	2016	Rp	101,112,000,000	Rp	3,333,880,000,000	0.030
MPPA	2017	-Rp	1,669,614,000,000	Rp	3,876,194,000,000	-0.431
MPPA	2018	-Rp	1,070,666,000,000	Rp	2,887,516,000,000	-0.371
MPPA	2019	-Rp	314,601,000,000	Rp	2,618,390,000,000	-0.120
MPPA	2020	-Rp	407,687,000,000	Rp	2,763,099,000,000	-0.148
RALS	2016	Rp	465,065,000,000	Rp	1,008,981,000,000	0.461
RALS	2017	Rp	466,592,000,000	Rp	1,048,640,000,000	0.445
RALS	2018	Rp	717,172,000,000	Rp	1,093,095,000,000	0.656
RALS	2019	Rp	733,161,000,000	Rp	1,135,638,000,000	0.646
RALS	2020	Rp	181,445,000,000	Rp	925,658,000,000	0.196
RANC	2016	Rp	49,707,851,202	Rp	254,396,030,475	0.195
RANC	2017	Rp	47,109,826,388	Rp	302,213,795,172	0.156
RANC	2018	Rp	59,877,255,323	Rp	348,666,837,381	0.172
RANC	2019	Rp	64,038,406,949	Rp	348,625,244,359	0.184
RANC	2020	Rp	94,284,369,099	Rp	512,965,592,357	0.184
SONA	2016	-Rp	5,503,061,803	Rp	446,585,300,387	-0.012
SONA	2017	Rp	69,184,005,689	Rp	504,553,387,288	0.137
SONA	2018	Rp	162,897,913,618	Rp	488,710,639,868	0.333
SONA	2019	Rp	104,353,775,859	Rp	277,278,528,644	0.376
SONA	2020	-Rp	170,065,963,842	Rp	150,391,014,535	-1.131
TELE	2016	Rp	634,448,000,000	Rp	1,247,690,000,000	0.508
TELE	2017	Rp	561,247,000,000	Rp	2,068,709,000,000	0.271
TELE	2018	Rp	610,241,000,000	Rp	1,466,633,000,000	0.416
TELE	2019	-Rp	7,065,747,000,000	Rp	3,911,088,000,000	-1.807
TELE	2020	-Rp	1,063,160,000,000	Rp	3,949,979,000,000	-0.269
TRIO	2016	-Rp	434,721,028,687	Rp	4,204,061,085,053	-0.103
TRIO	2017	-Rp	124,815,870,429	Rp	670,486,781,041	-0.186
TRIO	2018	-Rp	12,273,399,044	Rp	829,311,833,210	-0.015
TRIO	2019	-Rp	101,986,961,830	Rp	809,331,977,134	-0.126
TRIO	2020	-Rp	277,923,559,679	Rp	972,203,816,034	-0.286

X4

PERUSAHAAN	TAHUN	$SATA = \frac{Sales}{Total Asset}$		SATA
		SALES	TOTAL ASET	
ACES	2016	Rp 4,884,064,456,253	Rp 3,731,101,667,891	1.309
ACES	2017	Rp 5,877,966,660,390	Rp 4,428,840,550,479	1.327
ACES	2018	Rp 7,124,230,646,381	Rp 5,321,180,855,541	1.339
ACES	2019	Rp 7,986,528,789,676	Rp 6,641,808,005,145	1.202

ACES	2020	Rp	7,275,828,758,719	Rp	7,247,063,894,294	1.004
AMRT	2016	Rp	56,107,056,000,000	Rp	19,474,367,000,000	2.881
AMRT	2017	Rp	61,464,903,000,000	Rp	21,901,740,000,000	2.806
AMRT	2018	Rp	66,817,305,000,000	Rp	22,165,988,000,000	3.014
AMRT	2019	Rp	72,944,988,000,000	Rp	23,992,313,000,000	3.040
AMRT	2020	Rp	75,826,880,000,000	Rp	25,970,743,000,000	2.920
CENT	2016	Rp	140,668,401,759	Rp	1,314,929,550,049	0.107
CENT	2017	Rp	707,974,000,000	Rp	4,494,835,000,000	0.158
CENT	2018	Rp	801,161,000,000	Rp	5,207,342,000,000	0.154
CENT	2019	Rp	831,777,000,000	Rp	5,729,085,000,000	0.145
CENT	2020	Rp	1,096,044,000,000	Rp	7,629,153,000,000	0.144
CSAP	2016	Rp	7,726,465,694,000	Rp	4,240,820,320,000	1.822
CSAP	2017	Rp	9,288,124,716,000	Rp	5,138,259,285,000	1.808
CSAP	2018	Rp	10,408,153,798,000	Rp	5,785,287,553,000	1.799
CSAP	2019	Rp	11,485,127,430,000	Rp	6,584,587,023,000	1.744
CSAP	2020	Rp	12,012,082,461,000	Rp	7,616,266,096,000	1.577
DAYA	2016	Rp	237,500,392,000	Rp	199,332,019,000	1.191
DAYA	2017	Rp	363,682,824,000	Rp	275,708,556,000	1.319
DAYA	2018	Rp	547,324,968,000	Rp	411,861,480,000	1.329
DAYA	2019	Rp	1,094,836,588,000	Rp	730,497,952,000	1.499
DAYA	2020	Rp	886,244,543,000	Rp	708,530,092,000	1.251
ECII	2016	Rp	1,659,849,583,812	Rp	1,881,645,933,066	0.882
ECII	2017	Rp	1,818,471,209,910	Rp	1,717,972,026,282	1.058
ECII	2018	Rp	2,003,208,506,432	Rp	1,751,622,687,179	1.144
ECII	2019	Rp	1,978,631,967,708	Rp	1,845,324,374,750	1.072
ECII	2020	Rp	1,618,490,505,399	Rp	1,730,596,456,562	0.935
ERAA	2016	Rp	20,547,128,076,480	Rp	7,424,604,403,847	2.767
ERAA	2017	Rp	24,229,915,014,000	Rp	8,873,955,770,000	2.730
ERAA	2018	Rp	34,744,177,481,000	Rp	12,682,902,626,000	2.739
ERAA	2019	Rp	32,944,902,671,000	Rp	9,747,703,198,000	3.380
ERAA	2020	Rp	34,113,454,845,000	Rp	11,211,369,042,000	3.043
GLOB	2016	Rp	562,959,661,885	Rp	74,599,266,089	7.546
GLOB	2017	Rp	621,534,450,144	Rp	60,812,090,345	10.221
GLOB	2018	Rp	514,434,171,115	Rp	37,180,128,513	13.836
GLOB	2019	Rp	238,615,469,362	Rp	8,278,414,392	28.824
GLOB	2020	Rp	30,671,505,593	Rp	10,616,363,611	2.889
HERO	2016	Rp	13,677,931,000,000	Rp	7,487,033,000,000	1.827
HERO	2017	Rp	13,033,638,000,000	Rp	7,363,144,000,000	1.770
HERO	2018	Rp	12,970,389,000,000	Rp	6,154,748,000,000	2.107
HERO	2019	Rp	12,181,025,000,000	Rp	6,054,384,000,000	2.012
HERO	2020	Rp	8,893,785,000,000	Rp	4,838,417,000,000	1.838
KOIN	2016	Rp	1,448,167,445,096	Rp	708,069,212,062	2.045
KOIN	2017	Rp	1,605,317,945,521	Rp	743,789,368,008	2.158
KOIN	2018	Rp	1,750,649,236,912	Rp	855,572,807,455	2.046
KOIN	2019	Rp	1,618,048,001,660	Rp	652,346,214,673	2.480

KOIN	2020	Rp	1,446,474,839,632	Rp	675,863,759,206	2.140
LPPF	2016	Rp	9,897,046,000,000	Rp	4,858,878,000,000	2.037
LPPF	2017	Rp	10,023,961,000,000	Rp	5,427,426,000,000	1.847
LPPF	2018	Rp	10,245,173,000,000	Rp	5,036,396,000,000	2.034
LPPF	2019	Rp	10,276,431,000,000	Rp	4,832,910,000,000	2.126
LPPF	2020	Rp	4,839,058,000,000	Rp	6,319,074,000,000	0.766
MAPI	2016	Rp	14,149,615,423,000	Rp	10,683,437,788,000	1.324
MAPI	2017	Rp	16,305,733,000,000	Rp	11,425,390,000,000	1.427
MAPI	2018	Rp	18,921,123,000,000	Rp	12,632,671,000,000	1.498
MAPI	2019	Rp	21,637,309,000,000	Rp	13,937,115,000,000	1.552
MAPI	2020	Rp	14,847,398,000,000	Rp	17,650,451,000,000	0.841
MIDI	2016	Rp	8,493,119,000,000	Rp	4,261,283,000,000	1.993
MIDI	2017	Rp	9,767,592,000,000	Rp	4,878,115,000,000	2.002
MIDI	2018	Rp	10,701,575,000,000	Rp	4,960,145,000,000	2.158
MIDI	2019	Rp	11,625,313,000,000	Rp	4,990,309,000,000	2.330
MIDI	2020	Rp	12,659,705,000,000	Rp	5,923,693,000,000	2.137
MKNT	2016	Rp	270,902,801,566	Rp	157,848,592,051	1.716
MKNT	2017	Rp	6,334,113,649,170	Rp	968,128,268,255	6.543
MKNT	2018	Rp	4,748,403,735,514	Rp	855,096,628,586	5.553
MKNT	2019	Rp	4,294,709,675,286	Rp	741,824,867,681	5.789
MKNT	2020	Rp	3,452,545,403,628	Rp	500,766,702,549	6.895
MPPA	2016	Rp	13,527,323,000,000	Rp	6,701,734,000,000	2.018
MPPA	2017	Rp	12,562,780,000,000	Rp	5,427,059,000,000	2.315
MPPA	2018	Rp	10,692,363,000,000	Rp	4,808,545,000,000	2.224
MPPA	2019	Rp	8,654,646,000,000	Rp	3,820,809,000,000	2.265
MPPA	2020	Rp	6,746,594,000,000	Rp	4,510,511,000,000	1.496
RALS	2016	Rp	5,857,037,000,000	Rp	4,647,009,000,000	1.260
RALS	2017	Rp	5,622,728,000,000	Rp	4,891,922,000,000	1.149
RALS	2018	Rp	5,739,553,000,000	Rp	5,243,047,000,000	1.095
RALS	2019	Rp	5,596,398,000,000	Rp	5,649,823,000,000	0.991
RALS	2020	Rp	2,527,951,000,000	Rp	5,285,218,000,000	0.478
RANC	2016	Rp	2,063,982,006,646	Rp	721,237,977,450	2.862
RANC	2017	Rp	2,189,573,735,873	Rp	804,020,324,861	2.723
RANC	2018	Rp	2,355,625,271,907	Rp	904,003,739,438	2.606
RANC	2019	Rp	2,397,792,415,330	Rp	952,496,300,846	2.517
RANC	2020	Rp	3,011,422,750,334	Rp	1,319,134,443,995	2.283
SONA	2016	Rp	1,429,794,539,022	Rp	1,031,213,478,568	1.387
SONA	2017	Rp	1,582,767,220,537	Rp	1,141,551,052,237	1.387
SONA	2018	Rp	1,977,016,177,884	Rp	1,250,810,082,430	1.581
SONA	2019	Rp	1,748,819,551,691	Rp	1,110,366,038,014	1.575
SONA	2020	Rp	245,551,577,771	Rp	853,905,287,718	0.288
TELE	2016	Rp	27,310,057,000,000	Rp	8,215,481,000,000	3.324
TELE	2017	Rp	27,914,330,000,000	Rp	8,749,797,000,000	3.190
TELE	2018	Rp	29,343,068,000,000	Rp	8,339,085,000,000	3.519
TELE	2019	Rp	28,442,132,000,000	Rp	2,956,614,000,000	9.620

TELE	2020	Rp	4,206,839,000,000	Rp	325,450,000,000	12.926
TRIO	2016	Rp	1,717,579,307,635	Rp	430,032,185,417	3.994
TRIO	2017	Rp	2,028,659,770,454	Rp	267,494,791,082	7.584
TRIO	2018	Rp	1,671,866,232,277	Rp	193,663,107,384	8.633
TRIO	2019	Rp	966,725,371,267	Rp	136,433,406,842	7.086
TRIO	2020	Rp	494,469,692,213	Rp	111,295,495,695	4.443