



LAMPIRAN 1

Penelitian Terdahulu

PENELITIAN TERDAHULU

A. Pengaruh Ukuran Perusahaan Terhadap Kinerja Keuangan

No	Nama Peneliti (Tahun)	Nama Variabel	Proksi (Pengukuran)	Hasil Penelitian
1	Krisdamayanti & Retnani (2020)	Ukuran Perusahaan	Log natural (total asset)	Berpengaruh positif
		Kinerja Keuangan	<i>Return on Asset (ROA)</i>	
2	Abdullah et al. (2019)	<i>Company Size</i>	<i>Total assets</i>	Berpengaruh positif
		<i>Financial Performance</i>	-	
3	Meiyana & Aisyah (2019)	Ukuran Perusahaan	Total aset	Berpengaruh positif
		Kinerja Keuangan	-	
4	Khan et al. (2017)	<i>Company Size</i>	<i>Natural log of total assets</i>	Berpengaruh positif
		<i>Financial Performance</i>	<i>Economic Value Added (EVA)</i>	

B. Pengaruh Ukuran Perusahaan Terhadap Kinerja Lingkungan

No	Nama Peneliti (Tahun)	Nama Variabel	Proksi (Pengukuran)	Hasil Penelitian
1	Widiastutik & Khafid (2021)	Ukuran Perusahaan (Size)	Ln (total aset)	Berpengaruh positif
		Peringkat PROPER	PROPER	
2	Farlinno & Bernawati (2020)	<i>Company Size</i>	<i>Ln. Total Asset</i>	Berpengaruh positif
		<i>Environmental Performance</i>	PROPER	
3	Tania & Herawaty (2019)	<i>Firm Size</i>	Total aset	Berpengaruh positif
		<i>Environmental Performance</i>	PROPER	
4	Tiurmali et al. (2018)	Ukuran Perusahaan	Ln (total aset)	Berpengaruh positif
		Kinerja Lingkungan	PROPER	

C. Pengaruh Ukuran Perusahaan Terhadap Pengungkapan Emisi Karbon

No	Nama Peneliti (Tahun)	Nama Variabel	Proksi (Pengukuran)	Hasil Penelitian
1	Pratiwi et al. (2021)	<i>Company Size</i>	<i>Logarithm of nominal value of company's total asset</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
2	Ratmono et al. (2021)	<i>Company Size</i>	<i>Logarithm of market capitalization</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
3	Saraswati, Amalia, et al. (2021)	<i>Company Size</i>	<i>Amount of total assets</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
4	Saraswati, Puspita, et al. (2021)	<i>Company Size</i>	<i>Natural logarithm of company's total assets</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
5	Abdullah, et al. (2020)	<i>Firm Size</i>	<i>Total assets of the company</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
6	Iswati & Setiawan (2020)	<i>Firm Size</i>	<i>Log natural of the total assets of the company at the end of the fiscal year</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
7	Triansyah et al. (2020)	<i>Firm Size</i>	<i>Logarithm of natural assets</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
8	Yusuf (2020)	Ukuran Perusahaan	Logaritma natural (Ln) total asset	Berpengaruh positif

		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
9	Putri et al. (2020)	<i>Company Size</i>	-	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
10	Deantari et al. (2019)	Ukuran Perusahaan	Logaritma natural dari total aset	Berpengaruh positif
		Pengungkapan Emisi Gas Rumah Kaca	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
11	Nasih et al. (2019)	<i>Firm Size</i>	<i>Natural logarithms (ln) total value of a company's assets</i>	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
12	Selviana & Ratmono (2019)	Ukuran Perusahaan	Nilai logaritma dari kapitalisasi pasar	Berpengaruh positif
		Pengungkapan Emisi Karbon	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
13	Hermawan et al. (2018)	<i>Company Size</i>	<i>Natural logarithm (Ln) of total company asset</i>	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
14	Salbiah & Mukhibad (2018)	<i>Size</i>	<i>Ln Total Assets</i>	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	

D. Pengaruh Kinerja Keuangan Terhadap Pengungkapan Emisi Karbon

No	Nama Peneliti (Tahun)	Nama Variabel	Proksi (Pengukuran)	Hasil Penelitian
1	Andrian & Kevin (2021)	<i>Financial Performance</i>	<i>Return On Assets (ROA)</i>	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>Total greenhouse gas emissions caused directly and indirectly by</i>	

			<i>individuals and activities of an organization</i>	
2	Saraswati, Amalia, et al. (2021)	<i>Profitability</i>	<i>Return On Equity (ROE)</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
3	Saraswati, Puspita, et al. (2021)	<i>Profitability</i>	<i>Return On Assets (ROA)</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
4	Pratiwi et al. (2021)	<i>Profitability</i>	<i>Return On Assets (ROA)</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
5	Abdullah et al. (2020)	<i>Profitability</i>	<i>Return On Assets (ROA)</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
6	Yusuf (2020)	<i>Profitabilitas</i>	<i>Return On Assets (ROA)</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
7	Wahyuningrum et al. (2019)	<i>Profitability</i>	<i>Return On Equity (ROE)</i>	Berpengaruh positif
		<i>GHG Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	
8	Hermawan et al. (2018)	<i>Profitability</i>	<i>Return On Assets (ROA)</i>	Berpengaruh positif
		<i>Carbon Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist (Choi et al., 2013)</i>	

E. Pengaruh Kinerja Lingkungan Terhadap Pengungkapan Emisi Karbon

No	Nama Peneliti (Tahun)	Nama Variabel	Proksi (Pengukuran)	Hasil Penelitian
1	Putri et al. (2020)	<i>Environmental Performance</i>	PROPER	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>Carbon Emission Disclosure Checklist</i> (Choi et al., 2013)	
2	Yusuf (2020)	Kinerja Lingkungan	PROPER	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>Carbon Emission Disclosure Checklist</i> (Choi et al., 2013)	
3	Deantari et al. (2019)	Kinerja Lingkungan	PROPER	Berpengaruh positif
		Pengungkapan Emisi Gas Rumah Kaca	<i>Carbon Emission Disclosure Checklist</i> (Choi et al., 2013)	
4	Krisnawanto & Solikhah (2019)	<i>Environmental Performance</i>	<i>Dummy assessment of company activities in an effort to maintain and improve environmental sustainability</i>	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>The extent of carbon emissions information disclosure using Febriani & Davianti (2018) measurement method</i>	
5	Setiawan & Iswati (2019)	<i>Environmental Performance</i>	PROPER	Berpengaruh positif
		<i>Carbon Emissions Disclosure</i>	<i>Carbon Emission Disclosure Checklist</i> (Choi et al., 2013)	
6	Wahyuningrum et al. (2019)	PROPER Rating	PROPER	Berpengaruh positif
		<i>GHG Emission Disclosure</i>	<i>Carbon Emission Disclosure Checklist</i> (Choi et al., 2013)	



LAMPIRAN 2

Hasil Seleksi Sampel Penelitian

HASIL SELEKSI SAMPEL PENELITIAN

No	Kode Saham	Tanggal Pencatatan	Sektor	Tahun 2016					Tahun 2017					Tahun 2018					Tahun 2019					Tahun 2020						
				Sudah Listing	Lolos Kriteria 1	Lolos Kriteria 2	Lolos Kriteria 3	Lolos Semua Kriteria	Sudah Listing	Lolos Kriteria 1	Lolos Kriteria 2	Lolos Kriteria 3	Lolos Semua Kriteria	Sudah Listing	Lolos Kriteria 1	Lolos Kriteria 2	Lolos Kriteria 3	Lolos Semua Kriteria	Sudah Listing	Lolos Kriteria 1	Lolos Kriteria 2	Lolos Kriteria 3	Lolos Semua Kriteria	Sudah Listing	Lolos Kriteria 1	Lolos Kriteria 2	Lolos Kriteria 3	Lolos Semua Kriteria		
1	ADMG	10/20/93	Basic Materials	v	v	v	x	x	v	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
2	AGII	9/28/16	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
3	AKPI	12/18/92	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
4	ALDO	7/12/11	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
5	ALKA	7/12/90	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
6	ALMI	1/2/97	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
7	ANTM	11/27/97	Basic Materials	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
8	APLI	5/1/00	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
9	ARCI	6/28/21	Basic Materials	x	x	x	x	x	v	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
10	AVIA	12/8/21	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
11	AYLS	2/12/20	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	x	x	x	
12	BAJA	12/21/11	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
13	BEBS	3/10/21	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
14	BMSR	12/29/99	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
15	BRMS	12/9/10	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
16	BRNA	11/6/89	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
17	BRPT	10/1/93	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
18	BTON	7/18/01	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
19	CITA	3/20/02	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
20	CLPI	11/30/01	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
21	CMNT	9/8/21	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
22	CTBN	11/28/89	Basic Materials	v	v	v	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
23	DKFT	11/21/97	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
24	DPNS	8/8/90	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
25	EKAD	8/14/90	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
26	EPAK	7/1/20	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	
27	ESIP	11/14/19	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	
28	ESSA	2/1/12	Basic Materials	v	v	v	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
29	FASW	12/19/94	Basic Materials	v	v	v	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
30	FPNI	3/21/02	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
31	GDST	12/23/09	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	x	v	v	x	x	x	v	v	x	x	v	v	x	x	x	
32	GGRP	9/19/19	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	
33	HKMU	10/9/18	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
34	IFII	12/10/19	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	
35	IFSH	12/5/19	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	x	
36	IGAR	11/5/90	Basic Materials	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	x	
37	INAI	12/5/94	Basic Materials	v	v	v	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
38	INCF	9/6/16	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
39	INCI	7/24/90	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
40	INCO	5/16/90	Basic Materials	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
41	INKP	7/16/90	Basic Materials	v	v	v	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	x	
42	INRU	6/18/90	Basic Materials	v	v	v	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
43	INTD	12/18/89	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
44	INTP	12/5/89	Basic Materials	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
45	IPOP	7/9/10	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
46	ISSP	2/22/13	Basic Materials	v	v	v	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
47	JKSW	8/6/97	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
48	KAYU	7/4/19	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	
49	KBRI	7/11/08	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
50	KDSI	7/29/96	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
51	KMTR	6/19/17	Basic Materials	x	x	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
52	KRAS	11/10/10	Basic Materials	v	v	v	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
53	LMSH	6/4/90	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
54	LTLS	7/21/97	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
55	MDKA	6/19/15	Basic Materials	v	v	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
56	MDKI	9/25/17	Basic Materials	x	x	x	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
57	MOLI	8/30/18	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
58	NICL	7/9/21	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
59	NIKL	12/14/09	Basic Materials	v	v	v	x	x	v	v	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
60	NPGF	4/14/21	Basic Materials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

127	ERTX	8/21/90	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
128	ESTA	3/9/20	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
129	ESTI	10/13/92	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
130	FAST	5/11/93	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
131	FILM	8/7/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
132	FITT	6/11/19	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	
133	FORU	1/17/02	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
134	GDYR	12/22/80	Consumer Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	
135	GEMA	8/12/02	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	v	v	x	x	x	v	v	x	x	x		
136	GJTL	5/8/90	Consumer Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	
137	GLOB	7/10/12	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
138	HDTX	6/6/90	Consumer Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	x	x	v	v	x	x	x	v	v	x	x	x	x	
139	HOME	7/17/08	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
140	HOTL	1/10/13	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	v	v	x	x	x	v	v	x	x	x	x	
141	HRME	4/12/19	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	x	
142	HRTA	6/21/17	Consumer Cyclical	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
143	IDEA	9/9/21	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
144	IHKP	10/14/02	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
145	IKAI	6/4/97	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	v	v	x	x	x	v	v	x	x	x	x	
146	IMAS	11/15/93	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
147	INDR	8/3/90	Consumer Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	
148	INDS	8/10/90	Consumer Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	x	x	v	v	v	v	x	x	v	v	x	x	x	
149	INOV	7/10/19	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	
150	IPTV	7/8/19	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	x	
151	JGLE	6/29/16	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
152	JHHD	2/29/84	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
153	JSPT	1/12/98	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
154	KICI	10/28/93	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
155	KPIG	3/30/00	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
156	LFLO	4/7/21	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
157	LMP1	10/17/94	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
158	LPIN	2/5/90	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
159	LPPF	10/9/89	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
160	LUCY	5/5/21	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
161	MABA	6/22/17	Consumer Cyclical	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
162	MAMI	2/9/94	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
163	MAPA	7/5/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
164	MAPB	6/21/17	Consumer Cyclical	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
165	MAP1	11/10/04	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
166	MARI	2/11/16	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
167	MASA	6/9/05	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
168	MDIA	4/11/14	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
169	MGLV	6/8/21	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
170	MICE	12/21/05	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
171	MINA	4/28/17	Consumer Cyclical	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
172	MKNT	10/26/15	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
173	MNCN	6/22/07	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
174	MPMX	5/29/13	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
175	MSIN	6/8/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
176	MSKY	7/9/12	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
177	MYTX	10/10/89	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
178	NASA	8/7/17	Consumer Cyclical	x	x	x	x	x	v	v	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	x	
179	NATO	1/18/19	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	
180	NETV	1/26/22	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
181	NIPS	7/24/91	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
182	NUSA	7/12/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
183	PANR	9/18/01	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
184	PBRX	8/16/90	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
185	PDES	7/8/08	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
186	PGLI	4/5/00	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
187	PJAA	7/2/04	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
188	PLAN	9/15/20	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	
189	PMJS	12/18/19	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	
190	PNSE	5/1/90	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
191	POLU	6/26/19	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	x	
192	POLY	3/12/91	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	v	x	x	v	v	x	x	x	

193	PRAS	7/12/90	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
194	PSKT	9/19/95	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
195	PTSP	5/30/94	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
196	PZZA	5/23/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
197	RALS	7/24/96	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
198	RICY	1/22/98	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
199	RISE	7/9/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
200	SBAT	4/8/20	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
201	SCMA	7/16/02	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
202	SCNP	9/7/20	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
203	SHID	5/8/90	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
204	SLJS	10/7/19	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x
205	SMSM	9/9/96	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x
206	SNLK	3/29/21	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
207	SOFA	7/7/20	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
208	SONA	7/21/92	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
209	SOTS	12/10/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
210	SRIL	6/17/13	Consumer Cyclical	v	v	v	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
211	SSTM	8/20/97	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
212	TELE	1/12/12	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
213	TFCO	2/26/80	Consumer Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x
214	TMPO	1/8/01	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
215	TOYS	8/6/20	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
216	TRIO	4/14/09	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
217	TRIS	6/28/12	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
218	TURI	5/16/95	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
219	UANG	7/6/20	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
220	UFOE	2/1/21	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
221	UNIT	4/18/02	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
222	VIVA	11/21/11	Consumer Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
223	WIFI	12/30/20	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
224	WOOD	6/21/17	Consumer Cyclical	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
225	YELO	10/29/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
226	ZONE	12/12/18	Consumer Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
227	AALI	12/9/97	Consumer Non-Cyclical	v	v	v	v	v	v	v	v	v	v	v	v	v	x	x	x	v	v	v	v	v	v	v	v	v
228	ADES	6/13/94	Consumer Non-Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	x	x	x	v	v	v	v	x	x	v	v	x	x
229	AGAR	12/2/19	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
230	AISA	6/11/97	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
231	ALTO	7/10/12	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
232	AMRT	1/15/09	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
233	ANDI	8/16/18	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
234	ANJT	5/8/13	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
235	BEEF	1/10/19	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x
236	BISI	5/28/07	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
237	BOBA	11/1/21	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
238	BTEK	5/14/04	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
239	BUDI	5/8/95	Consumer Non-Cyclical	v	v	v	x	x	v	v	v	v	x	x	v	v	x	x	v	v	v	v	x	x	v	v	x	x
240	BWPT	10/27/09	Consumer Non-Cyclical	v	v	v	x	x	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
241	CAMP	12/19/17	Consumer Non-Cyclical	x	x	x	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	v	x	x	v	v	x	x
242	CEKA	7/9/96	Consumer Non-Cyclical	v	v	v	x	x	v	v	v	v	v	v	v	x	x	x	v	v	v	x	x	v	v	x	x	x
243	CLEO	5/5/17	Consumer Non-Cyclical	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
244	CMRY	12/6/21	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
245	COCO	3/20/19	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
246	CPIN	3/18/91	Consumer Non-Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	x	x	x	v	v	v	v	x	x	v	v	x	x
247	CPRO	11/28/06	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
248	CSRA	1/9/20	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
249	DAYA	6/28/16	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
250	DLTA	2/27/84	Consumer Non-Cyclical	v	v	v	x	x	v	v	v	x	x	v	v	v	x	x	v	v	v	v	x	x	v	v	x	x
251	DMND	1/22/20	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
252	DPUM	12/8/15	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
253	DSFI	3/24/00	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
254	DSNG	6/14/13	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
255	ENZO	9/14/20	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
256	EPMT	8/1/94	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
257	FAPA	1/4/21	Consumer Non-Cyclical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
258	FISH	1/18/02	Consumer Non-Cyclical	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x

523	TBIG	10/26/10	Infrastructures	v	v	x	x	x	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
524	TGRA	5/16/17	Infrastructures	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
525	TLKM	11/14/95	Infrastructures	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
526	TOPS	6/16/17	Infrastructures	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
527	TOTL	7/25/06	Infrastructures	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
528	TOWR	3/8/10	Infrastructures	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
529	WEGE	11/30/17	Infrastructures	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
530	WIKA	10/29/07	Infrastructures	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
531	WSKT	12/19/12	Infrastructures	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
532	AMAN	3/13/20	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
533	APLN	11/11/10	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
534	ARMY	6/21/17	Properties & Real Estate	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
535	ASPI	2/17/20	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
536	ASRI	12/18/07	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
537	ATAP	12/11/20	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
538	BAPA	1/14/08	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
539	BAPI	9/16/19	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
540	BBSS	4/15/20	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
541	BCIP	12/11/09	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
542	BEST	4/10/12	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
543	BIKA	7/14/15	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
544	BIPP	10/23/95	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
545	BKDP	6/15/07	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
546	BKSL	7/28/97	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
547	BSDE	6/6/08	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
548	CITY	9/28/18	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
549	COWL	12/19/07	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
550	CPRI	4/11/19	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x
551	CSIS	5/10/17	Properties & Real Estate	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
552	CTRA	3/28/94	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
553	DADA	2/14/20	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
554	DART	5/8/90	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
555	DILD	9/4/91	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
556	DMAS	5/29/15	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
557	DUTI	11/2/94	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
558	ELTY	10/30/95	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
559	EMDE	1/12/11	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
560	FMIH	6/30/00	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
561	FORZ	4/28/17	Properties & Real Estate	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
562	GAMA	7/11/12	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
563	GMTD	12/11/00	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
564	GPRR	10/10/07	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
565	GWSA	12/23/11	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
566	HOMI	9/10/20	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
567	INDO	1/13/20	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
568	INPP	1/12/04	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
569	IPAC	6/30/21	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
570	JRPT	6/29/94	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
571	KBAG	4/8/20	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x
572	KUA	1/10/95	Properties & Real Estate	v	v	v	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
573	KOTA	7/9/19	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x
574	LAND	8/23/18	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
575	LCGP	7/13/07	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
576	LPCK	7/24/97	Properties & Real Estate	v	v	v	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
577	LPKR	6/28/96	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
578	LPLI	10/23/89	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
579	MDLN	1/18/93	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
580	MKPI	7/10/09	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
581	MMLP	6/12/15	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
582	MPRO	10/9/18	Properties & Real Estate	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	
583	MTLA	6/20/11	Properties & Real Estate	v	v	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
584	MTSM	1/8/92	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
585	MYRX	10/31/90	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
586	NIRO	9/13/12	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x
587	NZIA	9/25/19	Properties & Real Estate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	v	x	x	x	v	v	x	x	x
588	OMRE	8/22/94	Properties & Real Estate	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x	v	v	x	x	x

721	CFIN	8/27/90	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	v	x	x	x	x	
722	DEFI	7/6/01	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	v	x	x	x	x	
723	DNAR	7/11/14	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	v	x	x	x	x	
724	DNET	12/11/00	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	v	x	x	x	x	
725	FUJI	7/9/19	Financials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	x	x	x	x	v	x	x	x	
726	GSMF	10/23/89	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
727	H DFA	5/10/11	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
728	IBFN	12/22/14	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
729	IMJS	12/10/13	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
730	INPC	8/23/90	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
731	JMAS	12/18/17	Financials	x	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
732	LIFE	7/9/19	Financials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	x	x	x	x	v	x	x	x	
733	LPGI	7/22/97	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
734	LPSS	3/28/94	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
735	MASB	6/30/21	Financials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
736	MAYA	8/29/97	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
737	MCOR	7/3/07	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
738	MEGA	4/17/00	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
739	MFIN	9/6/05	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
740	MGNA	7/8/14	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
741	MREI	9/4/89	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
742	MTWI	10/12/17	Financials	x	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
743	NICK	5/2/18	Financials	x	x	x	x	x	x	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
744	NISP	10/20/94	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
745	NOBU	5/20/13	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
746	OCAP	10/10/03	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
747	PADI	1/9/12	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
748	PANS	5/31/00	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
749	PEGE	6/24/05	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
750	PLAS	3/16/01	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
751	PNBN	12/29/82	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
752	PNBS	1/15/14	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
753	PNIN	9/20/83	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
754	PNLF	6/14/83	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
755	POLA	11/16/18	Financials	x	x	x	x	x	x	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
756	POOL	5/20/91	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
757	RELI	7/13/05	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
758	SDRA	12/15/06	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
759	SFAN	6/19/19	Financials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	x	x	x	x	v	x	x	x	
760	SMMA	7/5/95	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
761	SRTG	6/26/13	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
762	STAR	7/13/11	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
763	TIFA	7/8/11	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
764	TRIM	1/31/00	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
765	TRUS	11/28/02	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
766	TUGU	5/28/18	Financials	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	v	x	x	x	x	v	x	x	x	
767	VICO	7/8/13	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
768	VINS	9/28/15	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
769	VRNA	6/25/08	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
770	WOMF	12/13/04	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
771	YULE	12/10/04	Financials	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	x	v	x	x	x	
Total				513	424	78	13	13	549	458	76	17	17	606	510	76	20	20	661	562	89	28	28	712	609	92	35	35



LAMPIRAN 3

Perhitungan Variabel Ukuran Perusahaan

PERHITUNGAN VARIABEL UKURAN PERUSAHAAN

No	Kode Saham	Nama Perusahaan	Tahun	Kurs	Total Aset (Non Rp)	Total Aset (Rp)	Ukuran Perusahaan
1	AALI	Astra Agro Lestari Tbk.	2016			24.226.122.000.000	30,818453
2	AALI	Astra Agro Lestari Tbk.	2017			24.935.426.000.000	30,847311
3	AALI	Astra Agro Lestari Tbk.	2019			26.974.124.000.000	30,925899
4	AALI	Astra Agro Lestari Tbk.	2020			27.781.231.000.000	30,955382
5	AKRA	AKR Corporindo Tbk.	2016			15.830.740.710.000	30,392975
6	AKRA	AKR Corporindo Tbk.	2017			16.823.208.531.000	30,453781
7	AKRA	AKR Corporindo Tbk.	2018			19.940.850.599.000	30,623792
8	AKRA	AKR Corporindo Tbk.	2019			21.409.046.173.000	30,694835
9	AKRA	AKR Corporindo Tbk.	2020			18.683.572.815.000	30,558666
10	ANTM	Aneka Tambang Tbk.	2016			29.981.535.812.000	31,031603
11	ANTM	Aneka Tambang Tbk.	2017			30.014.273.452.000	31,032694
12	ANTM	Aneka Tambang Tbk.	2018			33.306.390.807.000	31,136770
13	ANTM	Aneka Tambang Tbk.	2019			30.194.907.730.000	31,038694
14	ANTM	Aneka Tambang Tbk.	2020			31.729.512.995.000	31,088268
15	ARGO	Argo Pantes Tbk.	2020	14.285,71	80.185.206	1.145.502.942.857	27,766865
16	AUTO	Astra Otoparts Tbk.	2018			15.889.648.000.000	30,396689
17	AUTO	Astra Otoparts Tbk.	2019			16.015.709.000.000	30,404591
18	AUTO	Astra Otoparts Tbk.	2020			15.180.094.000.000	30,351006
19	BWPT	Eagle High Plantations Tbk.	2017			15.991.148.000.000	30,403056
20	BWPT	Eagle High Plantations Tbk.	2018			16.163.267.000.000	30,413762
21	BWPT	Eagle High Plantations Tbk.	2019			15.796.470.000.000	30,390808
22	BWPT	Eagle High Plantations Tbk.	2020			15.060.968.000.000	30,343128
23	CPIN	Charoen Pokphand Indonesia Tbk.	2020			31.159.291.000.000	31,070134
24	DSSA	Dian Swastatika Sentosa Tbk.	2019	14.285,71	3.718.973.064	53.128.186.628.571	31,603729
25	GGRP	Gunung Raja Paksi Tbk.	2019	13.901,00	1.069.134.920	14.862.044.522.920	30,329832
26	GGRP	Gunung Raja Paksi Tbk.	2020	14.105,00	1.032.641.969	14.565.414.972.745	30,309671
27	INAI	Indal Aluminium Industry Tbk.	2019			1.212.894.403.676	27,824031
28	INAI	Indal Aluminium Industry Tbk.	2020			1.395.969.637.457	27,964610
29	INCO	Vale Indonesia Tbk.	2016	13.465,00	2.225.492.000	29.966.249.780.000	31,031093
30	INCO	Vale Indonesia Tbk.	2017	13.611,00	2.184.559.000	29.734.032.549.000	31,023313
31	INCO	Vale Indonesia Tbk.	2018	14.402,00	2.202.452.000	31.719.713.704.000	31,087959
32	INCO	Vale Indonesia Tbk.	2019	13.897,00	2.222.688.000	30.888.695.136.000	31,061411
33	INCO	Vale Indonesia Tbk.	2020	14.044,00	2.314.658.000	32.507.056.952.000	31,112478

34	INRU	Toba Pulp Lestari Tbk.	2019	13.888,89	480.886.000	6.678.972.222.222	29,529985
35	INRU	Toba Pulp Lestari Tbk.	2020	14.084,51	464.637.000	6.544.183.098.592	29,509598
36	INTP	Indocement Tunggul Prakarsa Tbk.	2016			30.150.580.000.000	31,037225
37	INTP	Indocement Tunggul Prakarsa Tbk.	2017			28.863.676.000.000	30,993605
38	INTP	Indocement Tunggul Prakarsa Tbk.	2018			27.788.562.000.000	30,955646
39	INTP	Indocement Tunggul Prakarsa Tbk.	2019			27.707.749.000.000	30,952733
40	INTP	Indocement Tunggul Prakarsa Tbk.	2020			27.344.672.000.000	30,939543
41	ISSP	Steel Pipe Industry of Indonesia Tbk.	2020			6.076.604.000.000	29,435467
42	JPFA	Japfa Comfeed Indonesia Tbk.	2018			23.038.028.000.000	30,768167
43	JPFA	Japfa Comfeed Indonesia Tbk.	2019			25.185.009.000.000	30,857270
44	JPFA	Japfa Comfeed Indonesia Tbk.	2020			25.951.760.000.000	30,887261
45	KAEF	Kimia Farma Tbk.	2020			17.562.816.674.000	30,496805
46	KLBF	Kalbe Farma Tbk.	2017			16.616.239.416.335	30,441402
47	KLBF	Kalbe Farma Tbk.	2018			18.146.206.145.369	30,529483
48	KLBF	Kalbe Farma Tbk.	2019			20.264.726.862.584	30,639903
49	KLBF	Kalbe Farma Tbk.	2020			22.564.300.317.374	30,747390
50	LSIP	PP London Sumatra Indonesia Tbk.	2017			9.744.381.000.000	29,907712
51	LSIP	PP London Sumatra Indonesia Tbk.	2018			10.037.294.000.000	29,937329
52	LSIP	PP London Sumatra Indonesia Tbk.	2019			10.225.322.000.000	29,955888
53	LSIP	PP London Sumatra Indonesia Tbk.	2020			10.922.788.000.000	30,021872
54	MERK	Merck Tbk.	2019			901.060.986.000	27,526839
55	MERK	Merck Tbk.	2020			929.901.046.000	27,558344
56	MLBI	Multi Bintang Indonesia Tbk.	2016			2.275.038.000.000	28,453018
57	MLBI	Multi Bintang Indonesia Tbk.	2017			2.510.078.000.000	28,551335
58	MLBI	Multi Bintang Indonesia Tbk.	2018			2.889.501.000.000	28,692105
59	MLBI	Multi Bintang Indonesia Tbk.	2019			2.896.950.000.000	28,694680
60	MLBI	Multi Bintang Indonesia Tbk.	2020			2.907.425.000.000	28,698289
61	PEHA	Phapros Tbk.	2019			2.096.719.180.000	28,371395
62	PEHA	Phapros Tbk.	2020			1.915.989.375.000	28,281255
63	PGAS	Perusahaan Gas Negara Tbk.	2016	13.436,00	6.834.152.968	91.823.679.278.048	32,150891
64	PGAS	Perusahaan Gas Negara Tbk.	2017	13.548,00	6.293.128.991	85.259.311.570.068	32,076718
65	PGAS	Perusahaan Gas Negara Tbk.	2020	14.105,00	7.533.986.395	106.266.878.101.475	32,296975
66	POWR	Cikarang Listrindo Tbk.	2018	14.481,00	1.308.996.128	18.955.572.929.568	30,573119
67	POWR	Cikarang Listrindo Tbk.	2019	13.901,00	1.324.811.462	18.416.204.133.262	30,544252
68	POWR	Cikarang Listrindo Tbk.	2020	14.105,00	1.342.869.561	18.941.175.157.905	30,572359
69	PTBA	Bukit Asam Tbk.	2016			18.576.774.000.000	30,552933
70	PTBA	Bukit Asam Tbk.	2017			21.987.482.000.000	30,721494

71	PTBA	Bukit Asam Tbk.	2018			24.172.933.000.000	30,816255
72	PTBA	Bukit Asam Tbk.	2019			26.098.052.000.000	30,892882
73	PTBA	Bukit Asam Tbk.	2020			24.056.755.000.000	30,811437
74	SGRO	Sampoerna Agro Tbk.	2016			8.328.480.337.000	29,750702
75	SGRO	Sampoerna Agro Tbk.	2017			8.284.699.367.000	29,745431
76	SGRO	Sampoerna Agro Tbk.	2018			9.018.844.952.000	29,830337
77	SGRO	Sampoerna Agro Tbk.	2019			9.466.942.773.000	29,878827
78	SGRO	Sampoerna Agro Tbk.	2020			9.744.680.000.000	29,907743
79	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2018			3.337.628.000.000	28,836281
80	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2019			3.536.898.000.000	28,894271
81	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2020			3.849.516.000.000	28,978969
82	SIMP	Salim Ivomas Pratama Tbk.	2016			32.537.592.000.000	31,113417
83	SIMP	Salim Ivomas Pratama Tbk.	2017			33.397.766.000.000	31,139510
84	SIMP	Salim Ivomas Pratama Tbk.	2018			34.666.506.000.000	31,176795
85	SIMP	Salim Ivomas Pratama Tbk.	2019			34.910.838.000.000	31,183818
86	SIMP	Salim Ivomas Pratama Tbk.	2020			35.395.264.000.000	31,197599
87	SMAR	Smart Tbk.	2020			35.026.171.000.000	31,187117
88	SMBR	Semen Baturaja (Persero) Tbk.	2020			5.737.175.560.000	29,377988
89	SMCB	Solusi Bangun Indonesia Tbk.	2019			19.567.498.000.000	30,604891
90	SMCB	Solusi Bangun Indonesia Tbk.	2020			20.738.125.000.000	30,662995
91	SMGR	Semen Indonesia (Persero) Tbk.	2016			44.226.895.982.000	31,420354
92	SMGR	Semen Indonesia (Persero) Tbk.	2017			48.963.502.966.000	31,522096
93	SMGR	Semen Indonesia (Persero) Tbk.	2018			51.155.890.227.000	31,565899
94	SMGR	Semen Indonesia (Persero) Tbk.	2019			79.807.067.000.000	32,010633
95	SMGR	Semen Indonesia (Persero) Tbk.	2020			78.006.244.000.000	31,987810
96	SSMS	Sawit Sumbermas Sarana Tbk.	2018			11.296.112.298.000	30,055480
97	SSMS	Sawit Sumbermas Sarana Tbk.	2019			11.845.204.657.000	30,102944
98	SSMS	Sawit Sumbermas Sarana Tbk.	2020			12.775.930.059.000	30,178584
99	TINS	Timah Tbk.	2016			9.548.631.000.000	29,887419
100	TINS	Timah Tbk.	2017			11.876.309.000.000	30,105567
101	TINS	Timah Tbk.	2018			15.117.948.000.000	30,346904
102	TINS	Timah Tbk.	2019			20.361.278.000.000	30,644656
103	TINS	Timah Tbk.	2020			14.517.700.000.000	30,306390
104	TPIA	Chandra Asri Petrochemical Tbk.	2020	14.084,51	3.593.747.000	50.616.154.929.578	31,555292
105	UNTR	United Tractors Tbk.	2016			63.991.229.000.000	31,789767
106	UNTR	United Tractors Tbk.	2017			82.262.093.000.000	32,040932
107	UNTR	United Tractors Tbk.	2018			116.281.017.000.000	32,387031

108	UNTR	United Tractors Tbk.	2019			111.713.375.000.000	32,346958
109	UNTR	United Tractors Tbk.	2020			99.800.963.000.000	32,234199
110	UNVR	Unilever Indonesia Tbk.	2017			18.906.413.000.000	30,570522
111	UNVR	Unilever Indonesia Tbk.	2018			19.522.970.000.000	30,602613
112	UNVR	Unilever Indonesia Tbk.	2019			20.649.371.000.000	30,658706
113	UNVR	Unilever Indonesia Tbk.	2020			20.534.632.000.000	30,653134





LAMPIRAN 4

Perhitungan Variabel Kinerja Keuangan

PERHITUNGAN VARIABEL KINERJA KEUANGAN

No	Kode Saham	Nama Perusahaan	Tahun	Kurs	Laba Tahun Berjalan (Non Rp)	Total Ekuitas (Non Rp)	Laba Tahun Berjalan (Rp)	Total Ekuitas (Rp)	Kinerja Keuangan (ROE)
1	AALI	Astra Agro Lestari Tbk.	2016				2.114.299.000.000	17.593.482.000.000	0,120175
2	AALI	Astra Agro Lestari Tbk.	2017				2.113.629.000.000	18.536.438.000.000	0,114026
3	AALI	Astra Agro Lestari Tbk.	2019				243.629.000.000	18.978.527.000.000	0,012837
4	AALI	Astra Agro Lestari Tbk.	2020				893.779.000.000	19.247.794.000.000	0,046435
5	AKRA	AKR Corporindo Tbk.	2016				1.046.852.086.000	8.074.320.321.000	0,129652
6	AKRA	AKR Corporindo Tbk.	2017				1.304.600.520.000	9.029.649.347.000	0,144480
7	AKRA	AKR Corporindo Tbk.	2018				1.596.652.821.000	9.926.831.339.000	0,160842
8	AKRA	AKR Corporindo Tbk.	2019				703.077.279.000	10.066.861.340.000	0,069841
9	AKRA	AKR Corporindo Tbk.	2020				961.997.313.000	10.556.356.272.000	0,091130
10	ANTM	Aneka Tambang Tbk.	2016				64.806.188.000	18.408.795.573.000	0,003520
11	ANTM	Aneka Tambang Tbk.	2017				136.503.269.000	18.490.403.517.000	0,007382
12	ANTM	Aneka Tambang Tbk.	2018				874.426.593.000	19.739.230.723.000	0,044299
13	ANTM	Aneka Tambang Tbk.	2019				193.852.031.000	18.133.419.175.000	0,010690
14	ANTM	Aneka Tambang Tbk.	2020				1.149.353.693.000	19.039.449.025.000	0,060367
15	ARGO	Argo Pantes Tbk.	2020	14.285,71	-5.110.016	91.995.803	-73.000.228.571	1.314.225.757.143	-0,055546
16	AUTO	Astra Otoparts Tbk.	2018				680.801.000.000	11.263.635.000.000	0,060442
17	AUTO	Astra Otoparts Tbk.	2019				816.971.000.000	11.650.534.000.000	0,070123
18	AUTO	Astra Otoparts Tbk.	2020				-37.864.000.000	11.270.791.000.000	-0,003359
19	BWPT	Eagle High Plantations Tbk.	2017				-187.791.000.000	6.062.693.000.000	-0,030975
20	BWPT	Eagle High Plantations Tbk.	2018				-462.557.000.000	5.798.791.000.000	-0,079768
21	BWPT	Eagle High Plantations Tbk.	2019				-1.167.471.000.000	4.613.244.000.000	-0,253069
22	BWPT	Eagle High Plantations Tbk.	2020				-1.108.389.000.000	3.487.655.000.000	-0,317804
23	CPIN	Charoen Pokphand Indonesia Tbk.	2020				3.845.833.000.000	23.349.683.000.000	0,164706
24	DSSA	Dian Swastatika Sentosa Tbk.	2019	14.285,71	71.654.412	3.718.973.064	1.023.634.457.143	53.128.186.628.571	0,019267
25	GGRP	Gunung Raja Paksi Tbk.	2019	13.901,00	-20.770.194	691.743.085	-288.726.466.794	9.615.920.624.585	-0,030026
26	GGRP	Gunung Raja Paksi Tbk.	2020	14.105,00	-8.953.542	690.178.750	-126.289.709.910	9.734.971.268.750	-0,012973
27	INAI	Indal Aluminium Industry Tbk.	2019				33.558.115.185	319.268.405.613	0,105109
28	INAI	Indal Aluminium Industry Tbk.	2020				3.991.581.552	321.404.082.596	0,012419
29	INCO	Vale Indonesia Tbk.	2016	13.465,00	1.906.000	1.834.589.000	25.664.290.000	24.702.740.885.000	0,001039
30	INCO	Vale Indonesia Tbk.	2017	13.611,00	-15.271.000	1.819.367.000	-207.853.581.000	24.763.404.237.000	-0,008394
31	INCO	Vale Indonesia Tbk.	2018	14.402,00	60.512.000	1.883.727.000	871.493.824.000	27.129.436.254.000	0,032124
32	INCO	Vale Indonesia Tbk.	2019	13.897,00	57.400.000	1.941.693.000	797.687.800.000	26.983.707.621.000	0,029562
33	INCO	Vale Indonesia Tbk.	2020	14.044,00	82.819.000	2.020.388.000	1.163.110.036.000	28.374.329.072.000	0,040992

34	INRU	Toba Pulp Lestari Tbk.	2019	13.888,89	-19.460.000	150.591.000	-270.277.777.778	2.091.541.666.667	-0,129224
35	INRU	Toba Pulp Lestari Tbk.	2020	14.084,51	3.749.000	153.871.000	52.802.816.901	2.167.197.183.099	0,024365
36	INTP	Indocement Tunggul Prakarsa Tbk.	2016				3.870.319.000.000	26.138.703.000.000	0,148069
37	INTP	Indocement Tunggul Prakarsa Tbk.	2017				1.859.818.000.000	24.556.507.000.000	0,075736
38	INTP	Indocement Tunggul Prakarsa Tbk.	2018				1.145.937.000.000	23.221.589.000.000	0,049348
39	INTP	Indocement Tunggul Prakarsa Tbk.	2019				1.835.305.000.000	23.080.261.000.000	0,079518
40	INTP	Indocement Tunggul Prakarsa Tbk.	2020				1.806.337.000.000	22.176.248.000.000	0,081454
41	ISSP	Steel Pipe Industry of Indonesia Tbk.	2020				175.835.000.000	3.335.340.000.000	0,052719
42	JPFA	Japfa Comfeed Indonesia Tbk.	2018				2.253.201.000.000	10.214.809.000.000	0,220582
43	JPFA	Japfa Comfeed Indonesia Tbk.	2019				1.883.857.000.000	11.448.168.000.000	0,164555
44	JPFA	Japfa Comfeed Indonesia Tbk.	2020				1.221.904.000.000	11.411.970.000.000	0,107072
45	KAEF	Kimia Farma Tbk.	2020				20.425.756.000	7.105.672.046.000	0,002875
46	KLBF	Kalbe Farma Tbk.	2017				2.453.251.410.604	13.894.031.782.689	0,176569
47	KLBF	Kalbe Farma Tbk.	2018				2.497.261.964.757	15.294.594.796.354	0,163277
48	KLBF	Kalbe Farma Tbk.	2019				2.537.601.823.645	16.705.582.476.031	0,151901
49	KLBF	Kalbe Farma Tbk.	2020				2.799.622.515.814	18.276.082.144.080	0,153185
50	LSIP	PP London Sumatra Indonesia Tbk.	2017				763.423.000.000	8.122.165.000.000	0,093993
51	LSIP	PP London Sumatra Indonesia Tbk.	2018				329.426.000.000	8.332.119.000.000	0,039537
52	LSIP	PP London Sumatra Indonesia Tbk.	2019				252.630.000.000	8.498.500.000.000	0,029726
53	LSIP	PP London Sumatra Indonesia Tbk.	2020				695.490.000.000	9.286.332.000.000	0,074894
54	MERK	Merck Tbk.	2019				78.256.797.000	594.011.658.000	0,131743
55	MERK	Merck Tbk.	2020				71.902.263.000	612.683.025.000	0,117356
56	MLBI	Multi Bintang Indonesia Tbk.	2016				982.129.000.000	820.640.000.000	1,196784
57	MLBI	Multi Bintang Indonesia Tbk.	2017				1.322.067.000.000	1.064.905.000.000	1,241488
58	MLBI	Multi Bintang Indonesia Tbk.	2018				1.224.807.000.000	1.167.536.000.000	1,049053
59	MLBI	Multi Bintang Indonesia Tbk.	2019				1.206.059.000.000	1.146.007.000.000	1,052401
60	MLBI	Multi Bintang Indonesia Tbk.	2020				285.617.000.000	1.433.406.000.000	0,199258
61	PEHA	Phapros Tbk.	2019				102.310.124.000	821.609.349.000	0,124524
62	PEHA	Phapros Tbk.	2020				48.665.149.000	740.909.054.000	0,065683
63	PGAS	Perusahaan Gas Negara Tbk.	2016	13.436,00	308.583.916	3.170.193.334	4.146.133.495.376	42.594.717.635.624	0,097339
64	PGAS	Perusahaan Gas Negara Tbk.	2017	13.548,00	147.784.011	3.186.912.879	2.002.177.781.028	43.176.295.684.692	0,046372
65	PGAS	Perusahaan Gas Negara Tbk.	2020	14.105,00	-175.355.545	2.955.438.855	-2.473.389.962.225	41.686.465.049.775	-0,059333
66	POWR	Cikarang Listrindo Tbk.	2018	14.481,00	78.893.381	640.446.654	1.142.455.050.261	9.274.307.996.574	0,123185
67	POWR	Cikarang Listrindo Tbk.	2019	13.901,00	113.529.989	659.641.290	1.578.180.377.089	9.169.673.572.290	0,172109
68	POWR	Cikarang Listrindo Tbk.	2020	14.105,00	74.752.287	670.568.407	1.054.381.008.135	9.458.367.380.735	0,111476
69	PTBA	Bukit Asam Tbk.	2016				2.024.405.000.000	10.552.405.000.000	0,191843
70	PTBA	Bukit Asam Tbk.	2017				4.547.232.000.000	13.799.985.000.000	0,329510

71	PTBA	Bukit Asam Tbk.	2018				5.121.112.000.000	16.269.696.000.000	0,314764
72	PTBA	Bukit Asam Tbk.	2019				4.040.394.000.000	18.422.826.000.000	0,219315
73	PTBA	Bukit Asam Tbk.	2020				2.407.927.000.000	16.939.196.000.000	0,142151
74	SGRO	Sampoerna Agro Tbk.	2016				459.356.119.000	3.758.723.820.000	0,122211
75	SGRO	Sampoerna Agro Tbk.	2017				303.026.790.000	4.005.042.734.000	0,075661
76	SGRO	Sampoerna Agro Tbk.	2018				63.608.069.000	4.028.849.658.000	0,015788
77	SGRO	Sampoerna Agro Tbk.	2019				39.996.290.000	4.152.698.253.000	0,009631
78	SGRO	Sampoerna Agro Tbk.	2020				-191.747.000.000	3.796.056.000.000	-0,050512
79	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2018				663.849.000.000	2.902.614.000.000	0,228707
80	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2019				807.689.000.000	3.064.707.000.000	0,263545
81	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2020				934.016.000.000	3.221.740.000.000	0,289910
82	SIMP	Salim Ivomas Pratama Tbk.	2016				609.794.000.000	17.618.288.000.000	0,034611
83	SIMP	Salim Ivomas Pratama Tbk.	2017				695.433.000.000	18.180.779.000.000	0,038251
84	SIMP	Salim Ivomas Pratama Tbk.	2018				-178.067.000.000	18.286.677.000.000	-0,009738
85	SIMP	Salim Ivomas Pratama Tbk.	2019				-642.202.000.000	17.781.323.000.000	-0,036117
86	SIMP	Salim Ivomas Pratama Tbk.	2020				340.285.000.000	18.489.873.000.000	0,018404
87	SMAR	Smart Tbk.	2020				1.539.798.000.000	12.523.681.000.000	0,122951
88	SMBR	Semen Baturaja (Persero) Tbk.	2020				10.981.673.000	3.407.888.607.000	0,003222
89	SMCB	Solusi Bangun Indonesia Tbk.	2019				499.052.000.000	6.982.612.000.000	0,071471
90	SMCB	Solusi Bangun Indonesia Tbk.	2020				650.988.000.000	7.566.179.000.000	0,086039
91	SMGR	Semen Indonesia (Persero) Tbk.	2016				4.535.036.823.000	30.574.391.457.000	0,148328
92	SMGR	Semen Indonesia (Persero) Tbk.	2017				2.043.025.914.000	30.439.052.302.000	0,067119
93	SMGR	Semen Indonesia (Persero) Tbk.	2018				3.085.704.236.000	32.736.295.522.000	0,094259
94	SMGR	Semen Indonesia (Persero) Tbk.	2019				2.371.233.000.000	33.891.924.000.000	0,069965
95	SMGR	Semen Indonesia (Persero) Tbk.	2020				2.674.343.000.000	35.653.335.000.000	0,075010
96	SSMS	Sawit Sumbermas Sarana Tbk.	2018				86.770.969.000	4.069.182.342.000	0,021324
97	SSMS	Sawit Sumbermas Sarana Tbk.	2019				12.081.959.000	4.068.567.272.000	0,002970
98	SSMS	Sawit Sumbermas Sarana Tbk.	2020				580.854.940.000	4.870.786.420.000	0,119253
99	TINS	Timah Tbk.	2016				251.969.000.000	5.653.685.000.000	0,044567
100	TINS	Timah Tbk.	2017				502.417.000.000	6.061.493.000.000	0,082887
101	TINS	Timah Tbk.	2018				531.349.000.000	6.521.881.000.000	0,081472
102	TINS	Timah Tbk.	2019				-611.284.000.000	5.258.405.000.000	-0,116249
103	TINS	Timah Tbk.	2020				-340.602.000.000	4.940.136.000.000	-0,068946
104	TPIA	Chandra Asri Petrochemical Tbk.	2020	14.084,51	51.542.000	1.811.428.000	725.943.661.972	25.513.070.422.535	0,028454
105	UNTR	United Tractors Tbk.	2016				5.104.477.000.000	42.621.943.000.000	0,119762
106	UNTR	United Tractors Tbk.	2017				7.673.322.000.000	47.537.925.000.000	0,161415
107	UNTR	United Tractors Tbk.	2018				11.498.409.000.000	57.050.679.000.000	0,201547

108	UNTR	United Tractors Tbk.	2019				11.134.641.000.000	61.110.074.000.000	0,182206
109	UNTR	United Tractors Tbk.	2020				5.632.425.000.000	63.147.140.000.000	0,089195
110	UNVR	Unilever Indonesia Tbk.	2017				7.004.562.000.000	5.173.388.000.000	1,353960
111	UNVR	Unilever Indonesia Tbk.	2018				9.109.445.000.000	7.578.133.000.000	1,202070
112	UNVR	Unilever Indonesia Tbk.	2019				7.392.837.000.000	5.281.862.000.000	1,399665
113	UNVR	Unilever Indonesia Tbk.	2020				7.163.536.000.000	4.937.368.000.000	1,450882





LAMPIRAN 5

Perhitungan Variabel Kinerja Lingkungan

PERHITUNGAN VARIABEL KINERJA LINGKUNGAN

No	Kode Saham	Nama Perusahaan	Tahun	Perolehan Peringkat PROPER					Dikalikan Dengan Bobot Masing-Masing					Kinerja Lingkungan
				Emas	Hijau	Biru	Merah	Hitam	Emas x 5	Hijau x 4	Biru x 3	Merah x 2	Hitam x 1	
1	AALI	Astra Agro Lestari Tbk.	2016	0	1	1	0	0	0	4	3	0	0	0,466667
2	AALI	Astra Agro Lestari Tbk.	2017	0	1	1	0	0	0	4	3	0	0	0,466667
3	AALI	Astra Agro Lestari Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
4	AALI	Astra Agro Lestari Tbk.	2020	0	0	2	0	0	0	0	6	0	0	0,400000
5	AKRA	AKR Corporindo Tbk.	2016	0	0	1	0	0	0	0	3	0	0	0,200000
6	AKRA	AKR Corporindo Tbk.	2017	0	0	1	0	0	0	0	3	0	0	0,200000
7	AKRA	AKR Corporindo Tbk.	2018	0	0	1	0	0	0	0	3	0	0	0,200000
8	AKRA	AKR Corporindo Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
9	AKRA	AKR Corporindo Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
10	ANTM	Aneka Tambang Tbk.	2016	0	3	2	0	0	0	12	6	0	0	1,200000
11	ANTM	Aneka Tambang Tbk.	2017	1	2	2	0	0	5	8	6	0	0	1,266667
12	ANTM	Aneka Tambang Tbk.	2018	0	3	2	0	0	0	12	6	0	0	1,200000
13	ANTM	Aneka Tambang Tbk.	2019	0	3	2	0	0	0	12	6	0	0	1,200000
14	ANTM	Aneka Tambang Tbk.	2020	0	1	4	0	0	0	4	12	0	0	1,066667
15	ARGO	Argo Pantes Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
16	AUTO	Astra Otoparts Tbk.	2018	0	0	1	0	0	0	0	3	0	0	0,200000
17	AUTO	Astra Otoparts Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
18	AUTO	Astra Otoparts Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
19	BWPT	Eagle High Plantations Tbk.	2017	0	0	1	0	0	0	0	3	0	0	0,200000
20	BWPT	Eagle High Plantations Tbk.	2018	0	0	1	0	0	0	0	3	0	0	0,200000
21	BWPT	Eagle High Plantations Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
22	BWPT	Eagle High Plantations Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
23	CPIN	Charoen Pokphand Indonesia Tbk.	2020	0	0	7	0	0	0	0	21	0	0	1,400000
24	DSSA	Dian Swastatika Sentosa Tbk.	2019	0	0	0	1	0	0	0	0	2	0	0,133333
25	GGRP	Gunung Raja Paksi Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
26	GGRP	Gunung Raja Paksi Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
27	INAI	Indal Aluminium Industry Tbk.	2019	0	0	0	1	0	0	0	0	2	0	0,133333
28	INAI	Indal Aluminium Industry Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
29	INCO	Vale Indonesia Tbk.	2016	0	0	1	0	0	0	0	3	0	0	0,200000
30	INCO	Vale Indonesia Tbk.	2017	0	0	1	0	0	0	0	3	0	0	0,200000
31	INCO	Vale Indonesia Tbk.	2018	0	0	1	0	0	0	0	3	0	0	0,200000
32	INCO	Vale Indonesia Tbk.	2019	0	1	0	0	0	0	4	0	0	0	0,266667

33	INCO	Vale Indonesia Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
34	INRU	Toba Pulp Lestari Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
35	INRU	Toba Pulp Lestari Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
36	INTP	Indocement Tunggol Prakarsa Tbk.	2016	0	1	2	0	0	0	4	6	0	0	0,666667
37	INTP	Indocement Tunggol Prakarsa Tbk.	2017	0	0	3	0	0	0	0	9	0	0	0,600000
38	INTP	Indocement Tunggol Prakarsa Tbk.	2018	0	2	1	0	0	0	8	3	0	0	0,733333
39	INTP	Indocement Tunggol Prakarsa Tbk.	2019	0	1	2	0	0	0	4	6	0	0	0,666667
40	INTP	Indocement Tunggol Prakarsa Tbk.	2020	0	0	2	0	0	0	0	6	0	0	0,400000
41	ISSP	Steel Pipe Industry of Indonesia Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
42	JPFA	Japfa Comfeed Indonesia Tbk.	2018	0	0	10	0	0	0	0	30	0	0	2,000000
43	JPFA	Japfa Comfeed Indonesia Tbk.	2019	0	0	10	0	0	0	0	30	0	0	2,000000
44	JPFA	Japfa Comfeed Indonesia Tbk.	2020	0	0	11	0	0	0	0	33	0	0	2,200000
45	KAEF	Kimia Farma Tbk.	2020	0	0	2	1	0	0	0	6	2	0	0,533333
46	KLBF	Kalbe Farma Tbk.	2017	0	0	1	0	0	0	0	3	0	0	0,200000
47	KLBF	Kalbe Farma Tbk.	2018	0	1	0	0	0	0	4	0	0	0	0,266667
48	KLBF	Kalbe Farma Tbk.	2019	0	1	0	0	0	0	4	0	0	0	0,266667
49	KLBF	Kalbe Farma Tbk.	2020	0	1	0	0	0	0	4	0	0	0	0,266667
50	LSIP	PP London Sumatra Indonesia Tbk.	2017	0	0	6	0	0	0	0	18	0	0	1,200000
51	LSIP	PP London Sumatra Indonesia Tbk.	2018	0	0	5	0	0	0	0	15	0	0	1,000000
52	LSIP	PP London Sumatra Indonesia Tbk.	2019	0	0	4	1	0	0	0	12	2	0	0,933333
53	LSIP	PP London Sumatra Indonesia Tbk.	2020	0	0	5	0	0	0	0	15	0	0	1,000000
54	MERK	Merck Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
55	MERK	Merck Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
56	MLBI	Multi Bintang Indonesia Tbk.	2016	0	0	1	0	0	0	0	3	0	0	0,200000
57	MLBI	Multi Bintang Indonesia Tbk.	2017	0	1	0	0	0	0	4	0	0	0	0,266667
58	MLBI	Multi Bintang Indonesia Tbk.	2018	0	1	0	0	0	0	4	0	0	0	0,266667
59	MLBI	Multi Bintang Indonesia Tbk.	2019	0	0	2	0	0	0	0	6	0	0	0,400000
60	MLBI	Multi Bintang Indonesia Tbk.	2020	0	0	2	0	0	0	0	6	0	0	0,400000
61	PEHA	Pharos Tbk.	2019	0	1	0	0	0	0	4	0	0	0	0,266667
62	PEHA	Pharos Tbk.	2020	0	1	0	0	0	0	4	0	0	0	0,266667
63	PGAS	Perusahaan Gas Negara Tbk.	2016	0	0	1	0	0	0	0	3	0	0	0,200000
64	PGAS	Perusahaan Gas Negara Tbk.	2017	0	0	1	0	0	0	0	3	0	0	0,200000
65	PGAS	Perusahaan Gas Negara Tbk.	2020	0	1	3	0	0	0	4	9	0	0	0,866667
66	POWR	Cikarang Listrindo Tbk.	2018	0	0	1	0	0	0	0	3	0	0	0,200000
67	POWR	Cikarang Listrindo Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
68	POWR	Cikarang Listrindo Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
69	PTBA	Bukit Asam Tbk.	2016	1	0	1	0	0	5	0	3	0	0	0,533333

70	PTBA	Bukit Asam Tbk.	2017	1	0	1	0	0	5	0	3	0	0	0,533333
71	PTBA	Bukit Asam Tbk.	2018	1	1	1	0	0	5	4	3	0	0	0,800000
72	PTBA	Bukit Asam Tbk.	2019	1	1	1	0	0	5	4	3	0	0	0,800000
73	PTBA	Bukit Asam Tbk.	2020	1	0	2	0	0	5	0	6	0	0	0,733333
74	SGRO	Sampoerna Agro Tbk.	2016	0	0	1	0	0	0	0	3	0	0	0,200000
75	SGRO	Sampoerna Agro Tbk.	2017	0	0	1	0	0	0	0	3	0	0	0,200000
76	SGRO	Sampoerna Agro Tbk.	2018	0	0	1	0	0	0	0	3	0	0	0,200000
77	SGRO	Sampoerna Agro Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
78	SGRO	Sampoerna Agro Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
79	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2018	0	1	0	0	0	0	4	0	0	0	0,266667
80	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2019	0	1	0	0	0	0	4	0	0	0	0,266667
81	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2020	1	0	0	0	0	5	0	0	0	0	0,333333
82	SIMP	Salim Ivomas Pratama Tbk.	2016	0	0	6	0	0	0	0	18	0	0	1,200000
83	SIMP	Salim Ivomas Pratama Tbk.	2017	0	0	7	0	0	0	0	21	0	0	1,400000
84	SIMP	Salim Ivomas Pratama Tbk.	2018	0	0	7	0	0	0	0	21	0	0	1,400000
85	SIMP	Salim Ivomas Pratama Tbk.	2019	0	0	7	1	0	0	0	21	2	0	1,533333
86	SIMP	Salim Ivomas Pratama Tbk.	2020	0	0	7	1	0	0	0	21	2	0	1,533333
87	SMAR	Smart Tbk.	2020	0	0	5	0	0	0	0	15	0	0	1,000000
88	SMBR	Semen Baturaja (Persero) Tbk.	2020	0	0	2	0	0	0	0	6	0	0	0,400000
89	SMCB	Solusi Bangun Indonesia Tbk.	2019	0	0	3	0	0	0	0	9	0	0	0,600000
90	SMCB	Solusi Bangun Indonesia Tbk.	2020	0	2	1	0	0	0	8	3	0	0	0,733333
91	SMGR	Semen Indonesia (Persero) Tbk.	2016	0	1	0	0	0	0	4	0	0	0	0,266667
92	SMGR	Semen Indonesia (Persero) Tbk.	2017	0	1	0	0	0	0	4	0	0	0	0,266667
93	SMGR	Semen Indonesia (Persero) Tbk.	2018	0	1	0	0	0	0	4	0	0	0	0,266667
94	SMGR	Semen Indonesia (Persero) Tbk.	2019	0	1	1	0	0	0	4	3	0	0	0,466667
95	SMGR	Semen Indonesia (Persero) Tbk.	2020	0	0	2	0	0	0	0	6	0	0	0,400000
96	SSMS	Sawit Sumbermas Sarana Tbk.	2018	0	0	1	0	0	0	0	3	0	0	0,200000
97	SSMS	Sawit Sumbermas Sarana Tbk.	2019	0	0	1	0	0	0	0	3	0	0	0,200000
98	SSMS	Sawit Sumbermas Sarana Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
99	TINS	Timah Tbk.	2016	0	0	9	0	0	0	0	27	0	0	1,800000
100	TINS	Timah Tbk.	2017	0	0	6	0	0	0	0	18	0	0	1,200000
101	TINS	Timah Tbk.	2018	0	0	7	0	0	0	0	21	0	0	1,400000
102	TINS	Timah Tbk.	2019	0	1	6	0	0	0	4	18	0	0	1,466667
103	TINS	Timah Tbk.	2020	0	2	6	0	0	0	8	18	0	0	1,733333
104	TPIA	Chandra Asri Petrochemical Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
105	UNTR	United Tractors Tbk.	2016	0	0	1	0	0	0	0	3	0	0	0,200000
106	UNTR	United Tractors Tbk.	2017	0	0	1	0	0	0	0	3	0	0	0,200000

107	UNTR	United Tractors Tbk.	2018	0	1	0	0	0	0	4	0	0	0	0,266667
108	UNTR	United Tractors Tbk.	2019	0	1	0	0	0	0	4	0	0	0	0,266667
109	UNTR	United Tractors Tbk.	2020	0	0	1	0	0	0	0	3	0	0	0,200000
110	UNVR	Unilever Indonesia Tbk.	2017	0	0	2	0	0	0	0	6	0	0	0,400000
111	UNVR	Unilever Indonesia Tbk.	2018	0	0	2	0	0	0	0	6	0	0	0,400000
112	UNVR	Unilever Indonesia Tbk.	2019	0	0	2	0	0	0	0	6	0	0	0,400000
113	UNVR	Unilever Indonesia Tbk.	2020	0	0	2	0	0	0	0	6	0	0	0,400000





LAMPIRAN 6

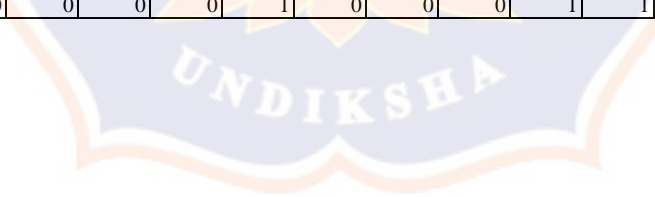
Perhitungan Variabel Pengungkapan Emisi Karbon

PERHITUNGAN VARIABEL PENGUNGKAPAN EMISI KARBON

No	Kode Saham	Nama Perusahaan	Tahun	CC1	CC2	GHG1	GHG2	GHG3	GHG4	GHG5	GHG6	GHG7	EC1	EC2	EC3	RC1	RC2	RC3	RC4	ACC1	ACC2	Tota
1	AALI	Astra Agro Lestari Tbk.	2016	0	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0
2	AALI	Astra Agro Lestari Tbk.	2017	0	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0
3	AALI	Astra Agro Lestari Tbk.	2019	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1
4	AALI	Astra Agro Lestari Tbk.	2020	0	0	1	0	1	0	0	1	1	1	0	0	1	0	1	0	0	0	0
5	AKRA	AKR Corporindo Tbk.	2016	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
6	AKRA	AKR Corporindo Tbk.	2017	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
7	AKRA	AKR Corporindo Tbk.	2018	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
8	AKRA	AKR Corporindo Tbk.	2019	1	0	1	0	1	1	1	0	1	1	0	0	1	0	0	0	0	0	0
9	AKRA	AKR Corporindo Tbk.	2020	1	0	1	0	1	1	1	0	1	1	0	1	1	0	0	0	0	0	1
10	ANTM	Aneka Tambang Tbk.	2016	1	0	1	0	1	1	0	1	1	1	0	1	1	0	1	0	0	0	0
11	ANTM	Aneka Tambang Tbk.	2017	1	0	1	0	1	1	0	1	1	1	0	1	1	0	1	0	0	0	0
12	ANTM	Aneka Tambang Tbk.	2018	1	0	1	0	1	1	0	1	1	1	0	1	1	0	1	0	1	0	0
13	ANTM	Aneka Tambang Tbk.	2019	1	0	1	0	1	1	0	1	1	1	0	1	1	0	1	0	0	0	0
14	ANTM	Aneka Tambang Tbk.	2020	1	0	1	0	1	1	0	1	1	1	0	1	1	0	1	0	1	0	0
15	ARGO	Argo Pantes Tbk.	2020	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
16	AUTO	Astra Otoparts Tbk.	2018	1	0	0	0	1	0	0	0	0	1	0	1	1	0	1	0	1	0	0
17	AUTO	Astra Otoparts Tbk.	2019	1	0	0	0	1	0	0	0	0	1	0	1	1	0	1	0	1	0	0
18	AUTO	Astra Otoparts Tbk.	2020	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	1	0	0
19	BWPT	Eagle High Plantations Tbk.	2017	1	1	1	0	1	0	1	1	0	1	0	1	1	0	0	0	1	1	1
20	BWPT	Eagle High Plantations Tbk.	2018	1	1	1	0	1	1	1	1	1	1	0	1	1	0	0	0	1	0	0
21	BWPT	Eagle High Plantations Tbk.	2019	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
22	BWPT	Eagle High Plantations Tbk.	2020	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1
23	CPIN	Charoen Pokphand Indonesia Tbk.	2020	0	0	0	0	1	0	0	1	1	1	1	1	1	0	0	0	1	0	0
24	DSSA	Dian Swastatika Sentosa Tbk.	2019	1	0	0	0	1	0	1	0	1	1	1	1	1	0	0	0	0	0	1
25	GGRP	Gunung Raja Paksi Tbk.	2019	1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	1
26	GGRP	Gunung Raja Paksi Tbk.	2020	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	1
27	INAI	Indal Aluminium Industry Tbk.	2019	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
28	INAI	Indal Aluminium Industry Tbk.	2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	INCO	Vale Indonesia Tbk.	2016	1	0	1	0	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0
30	INCO	Vale Indonesia Tbk.	2017	1	0	1	0	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0
31	INCO	Vale Indonesia Tbk.	2018	1	1	1	0	1	0	0	0	1	1	1	1	1	0	1	0	1	0	0
32	INCO	Vale Indonesia Tbk.	2019	1	1	1	0	1	0	0	0	1	1	1	1	1	0	1	0	0	0	0
33	INCO	Vale Indonesia Tbk.	2020	1	0	1	0	1	1	0	0	1	1	1	1	1	1	1	0	1	1	1
34	INRU	Toba Pulp Lestari Tbk.	2019	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
35	INRU	Toba Pulp Lestari Tbk.	2020	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
36	INTP	Indocement Tunggal Prakarsa Tbk.	2016	1	0	1	1	1	1	0	1	1	1	0	1	1	1	0	0	1	1	1
37	INTP	Indocement Tunggal Prakarsa Tbk.	2017	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1
38	INTP	Indocement Tunggal Prakarsa Tbk.	2018	1	0	1	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	1
39	INTP	Indocement Tunggal Prakarsa Tbk.	2019	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1

40	INTP	Indocement Tunggul Prakarsa Tbk.	2020	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1
41	ISSP	Steel Pipe Industry of Indonesia Tbk.	2020	1	0	0	0	1	0	0	0	1	0	1	1	0	0	0	0	0
42	JPFA	Japfa Comfeed Indonesia Tbk.	2018	1	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	
43	JPFA	Japfa Comfeed Indonesia Tbk.	2019	0	0	1	0	1	1	0	0	1	1	1	1	0	0	0	1	
44	JPFA	Japfa Comfeed Indonesia Tbk.	2020	1	0	1	0	1	1	0	0	1	1	1	1	0	0	0	1	
45	KAEF	Kimia Farma Tbk.	2020	1	0	0	0	1	0	0	1	1	1	0	1	1	0	1	0	
46	KLBF	Kalbe Farma Tbk.	2017	1	0	1	0	1	1	1	1	1	1	1	1	0	0	0	1	
47	KLBF	Kalbe Farma Tbk.	2018	1	0	0	0	1	1	1	1	1	1	1	1	0	1	0	1	
48	KLBF	Kalbe Farma Tbk.	2019	1	0	1	0	1	1	1	0	1	1	1	1	0	0	0	1	
49	KLBF	Kalbe Farma Tbk.	2020	1	0	1	0	1	1	1	0	1	1	1	1	1	0	0	1	
50	LSIP	PP London Sumatra Indonesia Tbk.	2017	0	0	1	0	1	1	1	0	1	1	1	1	0	0	0	0	
51	LSIP	PP London Sumatra Indonesia Tbk.	2018	0	0	1	0	1	1	1	0	1	1	1	1	0	0	0	0	
52	LSIP	PP London Sumatra Indonesia Tbk.	2019	1	0	1	0	1	1	1	0	1	1	1	1	0	0	0	0	
53	LSIP	PP London Sumatra Indonesia Tbk.	2020	1	0	1	0	1	1	1	0	1	1	1	1	0	1	0	0	
54	MERK	Merck Tbk.	2019	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	
55	MERK	Merck Tbk.	2020	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	
56	MLBI	Multi Bintang Indonesia Tbk.	2016	0	0	0	0	1	0	0	0	1	1	0	0	1	0	1	0	
57	MLBI	Multi Bintang Indonesia Tbk.	2017	0	0	0	0	1	1	0	0	1	1	0	1	1	1	0	0	
58	MLBI	Multi Bintang Indonesia Tbk.	2018	1	0	0	0	1	0	0	0	1	1	0	1	0	0	1	0	
59	MLBI	Multi Bintang Indonesia Tbk.	2019	0	0	0	0	1	1	0	0	0	1	0	1	1	0	1	0	
60	MLBI	Multi Bintang Indonesia Tbk.	2020	1	0	0	0	1	1	0	0	0	1	1	1	1	0	0	0	
61	PEHA	Phapros Tbk.	2019	0	0	1	0	1	1	0	0	1	1	0	1	0	0	0	0	
62	PEHA	Phapros Tbk.	2020	0	0	1	0	1	1	0	0	1	1	0	1	0	0	0	0	
63	PGAS	Perusahaan Gas Negara Tbk.	2016	1	0	1	0	1	1	1	0	1	1	0	1	1	0	1	0	
64	PGAS	Perusahaan Gas Negara Tbk.	2017	1	1	1	0	1	1	1	0	1	1	0	0	1	0	0	1	
65	PGAS	Perusahaan Gas Negara Tbk.	2020	1	0	1	0	1	1	1	0	1	1	1	1	0	1	0	0	
66	POWR	Cikarang Listrindo Tbk.	2018	1	0	0	0	1	0	0	0	0	1	0	0	1	0	0	1	
67	POWR	Cikarang Listrindo Tbk.	2019	1	0	1	1	1	1	1	1	0	1	1	1	1	0	1	0	
68	POWR	Cikarang Listrindo Tbk.	2020	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	
69	PTBA	Bukit Asam Tbk.	2016	1	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	
70	PTBA	Bukit Asam Tbk.	2017	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	
71	PTBA	Bukit Asam Tbk.	2018	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	
72	PTBA	Bukit Asam Tbk.	2019	1	0	1	0	1	1	1	0	0	1	1	1	1	0	1	0	
73	PTBA	Bukit Asam Tbk.	2020	0	0	1	0	1	1	1	0	0	1	1	1	1	0	1	0	
74	SGRO	Sampoerna Agro Tbk.	2016	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
75	SGRO	Sampoerna Agro Tbk.	2017	1	0	0	0	1	0	0	0	0	0	1	0	1	0	0	1	
76	SGRO	Sampoerna Agro Tbk.	2018	0	0	1	0	0	0	0	0	0	0	1	0	1	0	1	0	
77	SGRO	Sampoerna Agro Tbk.	2019	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	
78	SGRO	Sampoerna Agro Tbk.	2020	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	1	
79	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2018	0	0	0	0	1	1	0	0	1	1	0	1	1	0	0	1	
80	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2019	1	0	0	0	1	1	0	0	1	1	0	1	1	0	0	0	
81	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2020	1	0	0	0	1	1	0	0	1	1	0	1	1	0	1	0	
82	SIMP	Salim Ivomas Pratama Tbk.	2016	1	0	1	0	1	1	1	0	1	1	1	1	0	0	0	0	

83	SIMP	Salim Ivomas Pratama Tbk.	2017	1	0	1	0	1	1	1	0	1	1	1	1	0	0	0	0	0	0
84	SIMP	Salim Ivomas Pratama Tbk.	2018	0	0	1	0	1	1	1	0	1	1	1	1	0	0	0	0	1	0
85	SIMP	Salim Ivomas Pratama Tbk.	2019	1	0	1	0	1	1	1	0	1	1	1	1	0	0	0	0	1	0
86	SIMP	Salim Ivomas Pratama Tbk.	2020	1	0	1	0	1	1	1	0	1	1	1	1	1	0	1	0	1	0
87	SMAR	Smart Tbk.	2020	1	0	1	0	1	1	1	0	0	1	1	0	0	0	1	0	1	1
88	SMBR	Semen Baturaja (Persero) Tbk.	2020	1	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0
89	SMCB	Solusi Bangun Indonesia Tbk.	2019	1	0	1	0	1	1	0	0	1	1	0	0	1	0	1	0	1	0
90	SMCB	Solusi Bangun Indonesia Tbk.	2020	1	0	1	0	1	1	0	0	1	1	1	0	1	0	1	0	1	0
91	SMGR	Semen Indonesia (Persero) Tbk.	2016	1	1	1	0	1	1	1	1	1	1	0	1	0	1	0	1	1	1
92	SMGR	Semen Indonesia (Persero) Tbk.	2017	1	0	1	0	1	1	1	1	1	1	1	1	0	1	1	0	1	1
93	SMGR	Semen Indonesia (Persero) Tbk.	2018	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1
94	SMGR	Semen Indonesia (Persero) Tbk.	2019	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1
95	SMGR	Semen Indonesia (Persero) Tbk.	2020	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1
96	SSMS	Sawit Sumbermas Sarana Tbk.	2018	1	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0
97	SSMS	Sawit Sumbermas Sarana Tbk.	2019	0	0	1	0	1	0	0	0	1	1	1	1	1	0	1	0	0	0
98	SSMS	Sawit Sumbermas Sarana Tbk.	2020	1	0	0	0	1	0	1	0	1	1	1	1	1	0	0	0	0	0
99	TINS	Timah Tbk.	2016	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
100	TINS	Timah Tbk.	2017	1	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0
101	TINS	Timah Tbk.	2018	1	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0
102	TINS	Timah Tbk.	2019	1	0	1	0	1	1	1	0	1	1	0	1	1	0	1	0	1	0
103	TINS	Timah Tbk.	2020	1	0	1	0	1	1	1	0	1	1	0	1	1	0	0	0	1	0
104	TPIA	Chandra Asri Petrochemical Tbk.	2020	1	0	1	0	1	0	1	0	1	1	1	1	1	0	1	0	1	0
105	UNTR	United Tractors Tbk.	2016	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	0	1	0
106	UNTR	United Tractors Tbk.	2017	1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0
107	UNTR	United Tractors Tbk.	2018	1	0	0	0	1	1	0	0	1	1	0	1	1	0	1	0	0	0
108	UNTR	United Tractors Tbk.	2019	1	0	1	0	1	1	0	0	1	1	0	1	1	0	0	0	0	0
109	UNTR	United Tractors Tbk.	2020	0	0	0	0	1	1	0	1	1	1	0	1	1	0	1	0	0	0
110	UNVR	Unilever Indonesia Tbk.	2017	1	0	0	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0
111	UNVR	Unilever Indonesia Tbk.	2018	0	0	0	0	1	0	0	0	1	1	0	1	1	0	0	0	0	0
112	UNVR	Unilever Indonesia Tbk.	2019	1	0	0	0	1	0	0	0	1	0	1	0	1	1	1	0	0	0
113	UNVR	Unilever Indonesia Tbk.	2020	0	0	0	0	1	0	0	0	1	1	1	0	1	1	1	0	0	0





LAMPIRAN 7

Tabulasi Data Penelitian

TABULASI DATA PENELITIAN

No	Kode Saham	Nama Perusahaan	Tahun	X (Ukuran Perusahaan)	M1 (Kinerja Keuangan)	M2 (Kinerja Lingkungan)	Y (Pengungkapan Emisi Karbon)
1	AALI	Astra Agro Lestari Tbk.	2016	30,818453	0,120175	0,466667	4
2	AALI	Astra Agro Lestari Tbk.	2017	30,847311	0,114026	0,466667	4
3	AALI	Astra Agro Lestari Tbk.	2019	30,925899	0,012837	0,200000	3
4	AALI	Astra Agro Lestari Tbk.	2020	30,955382	0,046435	0,400000	7
5	AKRA	AKR Corporindo Tbk.	2016	30,392975	0,129652	0,200000	3
6	AKRA	AKR Corporindo Tbk.	2017	30,453781	0,144480	0,200000	2
7	AKRA	AKR Corporindo Tbk.	2018	30,623792	0,160842	0,200000	2
8	AKRA	AKR Corporindo Tbk.	2019	30,694835	0,069841	0,200000	8
9	AKRA	AKR Corporindo Tbk.	2020	30,558666	0,091130	0,200000	10
10	ANTM	Aneka Tambang Tbk.	2016	31,031603	0,003520	1,200000	10
11	ANTM	Aneka Tambang Tbk.	2017	31,032694	0,007382	1,266667	10
12	ANTM	Aneka Tambang Tbk.	2018	31,136770	0,044299	1,200000	11
13	ANTM	Aneka Tambang Tbk.	2019	31,038694	0,010690	1,200000	10
14	ANTM	Aneka Tambang Tbk.	2020	31,088268	0,060367	1,066667	11
15	ARGO	Argo Pantes Tbk.	2020	27,766865	-0,055546	0,200000	2
16	AUTO	Astra Otoparts Tbk.	2018	30,396689	0,060442	0,200000	7
17	AUTO	Astra Otoparts Tbk.	2019	30,404591	0,070123	0,200000	7
18	AUTO	Astra Otoparts Tbk.	2020	30,351006	-0,003359	0,200000	8
19	BWPT	Eagle High Plantations Tbk.	2017	30,403056	-0,030975	0,200000	11
20	BWPT	Eagle High Plantations Tbk.	2018	30,413762	-0,079768	0,200000	12
21	BWPT	Eagle High Plantations Tbk.	2019	30,390808	-0,253069	0,200000	16
22	BWPT	Eagle High Plantations Tbk.	2020	30,343128	-0,317804	0,200000	15
23	CPIN	Charoen Pokphand Indonesia Tbk.	2020	31,070134	0,164706	1,400000	8
24	DSSA	Dian Swastatika Sentosa Tbk.	2019	31,603729	0,019267	0,133333	9
25	GGRP	Gunung Raja Paksi Tbk.	2019	30,329832	-0,030026	0,200000	6
26	GGRP	Gunung Raja Paksi Tbk.	2020	30,309671	-0,012973	0,200000	5
27	INAI	Indal Aluminium Industry Tbk.	2019	27,824031	0,105109	0,133333	1
28	INAI	Indal Aluminium Industry Tbk.	2020	27,964610	0,012419	0,200000	1
29	INCO	Vale Indonesia Tbk.	2016	31,031093	0,001039	0,200000	9
30	INCO	Vale Indonesia Tbk.	2017	31,023313	-0,008394	0,200000	9
31	INCO	Vale Indonesia Tbk.	2018	31,087959	0,032124	0,200000	11
32	INCO	Vale Indonesia Tbk.	2019	31,061411	0,029562	0,266667	10
33	INCO	Vale Indonesia Tbk.	2020	31,112478	0,040992	0,200000	13

34	INRU	Toba Pulp Lestari Tbk.	2019	29,529985	-0,129224	0,200000	2
35	INRU	Toba Pulp Lestari Tbk.	2020	29,509598	0,024365	0,200000	2
36	INTP	Indocement Tunggal Prakarsa Tbk.	2016	31,037225	0,148069	0,666667	13
37	INTP	Indocement Tunggal Prakarsa Tbk.	2017	30,993605	0,075736	0,600000	15
38	INTP	Indocement Tunggal Prakarsa Tbk.	2018	30,955646	0,049348	0,733333	14
39	INTP	Indocement Tunggal Prakarsa Tbk.	2019	30,952733	0,079518	0,666667	14
40	INTP	Indocement Tunggal Prakarsa Tbk.	2020	30,939543	0,081454	0,400000	15
41	ISSP	Steel Pipe Industry of Indonesia Tbk.	2020	29,435467	0,052719	0,200000	5
42	JPFA	Japfa Comfeed Indonesia Tbk.	2018	30,768167	0,220582	2,000000	7
43	JPFA	Japfa Comfeed Indonesia Tbk.	2019	30,857270	0,164555	2,000000	9
44	JPFA	Japfa Comfeed Indonesia Tbk.	2020	30,887261	0,107072	2,200000	10
45	KAEF	Kimia Farma Tbk.	2020	30,496805	0,002875	0,533333	8
46	KLBF	Kalbe Farma Tbk.	2017	30,441402	0,176569	0,200000	11
47	KLBF	Kalbe Farma Tbk.	2018	30,529483	0,163277	0,266667	12
48	KLBF	Kalbe Farma Tbk.	2019	30,639903	0,151901	0,266667	11
49	KLBF	Kalbe Farma Tbk.	2020	30,747390	0,153185	0,266667	11
50	LSIP	PP London Sumatra Indonesia Tbk.	2017	29,907712	0,093993	1,200000	8
51	LSIP	PP London Sumatra Indonesia Tbk.	2018	29,937329	0,039537	1,000000	8
52	LSIP	PP London Sumatra Indonesia Tbk.	2019	29,955888	0,029726	0,933333	9
53	LSIP	PP London Sumatra Indonesia Tbk.	2020	30,021872	0,074894	1,000000	11
54	MERK	Merck Tbk.	2019	27,526839	0,131743	0,200000	4
55	MERK	Merck Tbk.	2020	27,558344	0,117356	0,200000	4
56	MLBI	Multi Bintang Indonesia Tbk.	2016	28,453018	1,196784	0,200000	5
57	MLBI	Multi Bintang Indonesia Tbk.	2017	28,551335	1,241488	0,266667	7
58	MLBI	Multi Bintang Indonesia Tbk.	2018	28,692105	1,049053	0,266667	6
59	MLBI	Multi Bintang Indonesia Tbk.	2019	28,694680	1,052401	0,400000	6
60	MLBI	Multi Bintang Indonesia Tbk.	2020	28,698289	0,199258	0,400000	7
61	PEHA	Phapros Tbk.	2019	28,371395	0,124524	0,266667	6
62	PEHA	Phapros Tbk.	2020	28,281255	0,065683	0,266667	6
63	PGAS	Perusahaan Gas Negara Tbk.	2016	32,150891	0,097339	0,200000	11
64	PGAS	Perusahaan Gas Negara Tbk.	2017	32,076718	0,046372	0,200000	10
65	PGAS	Perusahaan Gas Negara Tbk.	2020	32,296975	-0,059333	0,866667	11
66	POWR	Cikarang Listrindo Tbk.	2018	30,573119	0,123185	0,200000	5
67	POWR	Cikarang Listrindo Tbk.	2019	30,544252	0,172109	0,200000	13
68	POWR	Cikarang Listrindo Tbk.	2020	30,572359	0,111476	0,200000	15
69	PTBA	Bukit Asam Tbk.	2016	30,552933	0,191843	0,533333	6
70	PTBA	Bukit Asam Tbk.	2017	30,721494	0,329510	0,533333	6

71	PTBA	Bukit Asam Tbk.	2018	30,816255	0,314764	0,800000	6
72	PTBA	Bukit Asam Tbk.	2019	30,892882	0,219315	0,800000	11
73	PTBA	Bukit Asam Tbk.	2020	30,811437	0,142151	0,733333	10
74	SGRO	Sampoerna Agro Tbk.	2016	29,750702	0,122211	0,200000	3
75	SGRO	Sampoerna Agro Tbk.	2017	29,745431	0,075661	0,200000	5
76	SGRO	Sampoerna Agro Tbk.	2018	29,830337	0,015788	0,200000	4
77	SGRO	Sampoerna Agro Tbk.	2019	29,878827	0,009631	0,200000	3
78	SGRO	Sampoerna Agro Tbk.	2020	29,907743	-0,050512	0,200000	4
79	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2018	28,836281	0,228707	0,266667	7
80	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2019	28,894271	0,263545	0,266667	7
81	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.	2020	28,978969	0,289910	0,333333	8
82	SIMP	Salim Ivomas Pratama Tbk.	2016	31,113417	0,034611	1,200000	9
83	SIMP	Salim Ivomas Pratama Tbk.	2017	31,139510	0,038251	1,400000	9
84	SIMP	Salim Ivomas Pratama Tbk.	2018	31,176795	-0,009738	1,400000	9
85	SIMP	Salim Ivomas Pratama Tbk.	2019	31,183818	-0,036117	1,533333	10
86	SIMP	Salim Ivomas Pratama Tbk.	2020	31,197599	0,018404	1,533333	12
87	SMAR	Smart Tbk.	2020	31,187117	0,122951	1,000000	10
88	SMBR	Semen Baturaja (Persero) Tbk.	2020	29,377988	0,003222	0,400000	4
89	SMCB	Solusi Bangun Indonesia Tbk.	2019	30,604891	0,071471	0,600000	9
90	SMCB	Solusi Bangun Indonesia Tbk.	2020	30,662995	0,086039	0,733333	10
91	SMGR	Semen Indonesia (Persero) Tbk.	2016	31,420354	0,148328	0,266667	14
92	SMGR	Semen Indonesia (Persero) Tbk.	2017	31,522096	0,067119	0,266667	14
93	SMGR	Semen Indonesia (Persero) Tbk.	2018	31,565899	0,094259	0,266667	14
94	SMGR	Semen Indonesia (Persero) Tbk.	2019	32,010633	0,069965	0,466667	15
95	SMGR	Semen Indonesia (Persero) Tbk.	2020	31,987810	0,075010	0,400000	14
96	SSMS	Sawit Sumbermas Sarana Tbk.	2018	30,055480	0,021324	0,200000	5
97	SSMS	Sawit Sumbermas Sarana Tbk.	2019	30,102944	0,002970	0,200000	8
98	SSMS	Sawit Sumbermas Sarana Tbk.	2020	30,178584	0,119253	0,200000	8
99	TINS	Timah Tbk.	2016	29,887419	0,044567	1,800000	3
100	TINS	Timah Tbk.	2017	30,105567	0,082887	1,200000	4
101	TINS	Timah Tbk.	2018	30,346904	0,081472	1,400000	5
102	TINS	Timah Tbk.	2019	30,644656	-0,116249	1,466667	11
103	TINS	Timah Tbk.	2020	30,306390	-0,068946	1,733333	10
104	TPIA	Chandra Asri Petrochemical Tbk.	2020	31,555292	0,028454	0,200000	11
105	UNTR	United Tractors Tbk.	2016	31,789767	0,119762	0,200000	7
106	UNTR	United Tractors Tbk.	2017	32,040932	0,161415	0,200000	8
107	UNTR	United Tractors Tbk.	2018	32,387031	0,201547	0,266667	8

108	UNTR	United Tractors Tbk.	2019	32,346958	0,182206	0,266667	8
109	UNTR	United Tractors Tbk.	2020	32,234199	0,089195	0,200000	8
110	UNVR	Unilever Indonesia Tbk.	2017	30,570522	1,353960	0,400000	5
111	UNVR	Unilever Indonesia Tbk.	2018	30,602613	1,202070	0,400000	5
112	UNVR	Unilever Indonesia Tbk.	2019	30,658706	1,399665	0,400000	7
113	UNVR	Unilever Indonesia Tbk.	2020	30,653134	1,450882	0,400000	7



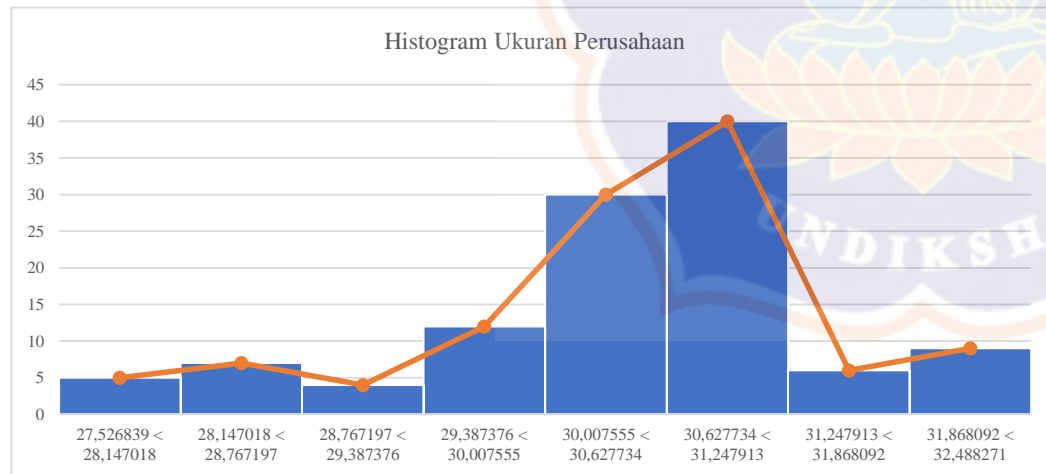


LAMPIRAN 8

Statistik Deskriptif Variabel Ukuran Perusahaan

STATISTIK DESKRIPTIF VARIABEL UKURAN PERUSAHAAN

Statistik Deskriptif	
Mean	30,445210
Standard Error	0,098752
Median	30,604891
Mode	#N/A
Standard Deviation	1,049749
Sample Variance	1,101973
Kurtosis	0,760020
Skewness	-0,829404
Range	4,860192
Minimum	27,526839
Maximum	32,387031
Sum	3440,308729
Count	113



Perhitungan Tabel Distribusi Frekuensi	
Jumlah Kelas (K)	7,836751217
Pembulatan K	8
Interval Kelas (Ci)	0,620179

Batas Kelas Bawah	Batas Kelas Atas
27,526839	28,147018
28,147018	28,767197
28,767197	29,387376
29,387376	30,007555
30,007555	30,627734
30,627734	31,247913
31,247913	31,868092
31,868092	32,488271

Tabel Distribusi Frekuensi	
Interval Kelas	Frekuensi
27,526839 < 28,147018	5
28,147018 < 28,767197	7
28,767197 < 29,387376	4
29,387376 < 30,007555	12
30,007555 < 30,627734	30
30,627734 < 31,247913	40
31,247913 < 31,868092	6
31,868092 < 32,488271	9
Total	113



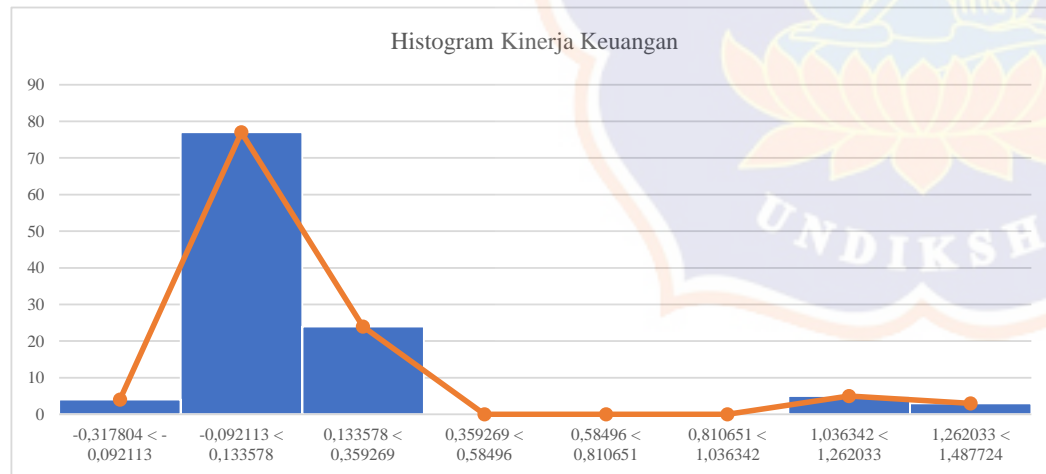


LAMPIRAN 9

Statistik Deskriptif Variabel Kinerja Keuangan

STATISTIK DESKRIPTIF VARIABEL KINERJA KEUANGAN

Statistik Deskriptif	
Mean	0,154707
Standard Error	0,029993
Median	0,075736
Mode	#N/A
Standard Deviation	0,318832
Sample Variance	0,101654
Kurtosis	8,293991
Skewness	2,935368
Range	1,768686
Minimum	-0,317804
Maximum	1,450882
Sum	17,481867
Count	113



Perhitungan Tabel Distribusi Frekuensi	
Jumlah Kelas (K)	7,836751217
Pembulatan K	8
Interval Kelas (Ci)	0,225691

Batas Kelas Bawah	Batas Kelas Atas
-0,317804	-0,092113
-0,092113	0,133578
0,133578	0,359269
0,359269	0,58496
0,58496	0,810651
0,810651	1,036342
1,036342	1,262033
1,262033	1,487724

Tabel Distribusi Frekuensi	
Interval Kelas	Frekuensi
-0,317804 < -0,092113	4
-0,092113 < 0,133578	77
0,133578 < 0,359269	24
0,359269 < 0,58496	0
0,58496 < 0,810651	0
0,810651 < 1,036342	0
1,036342 < 1,262033	5
1,262033 < 1,487724	3
Total	113



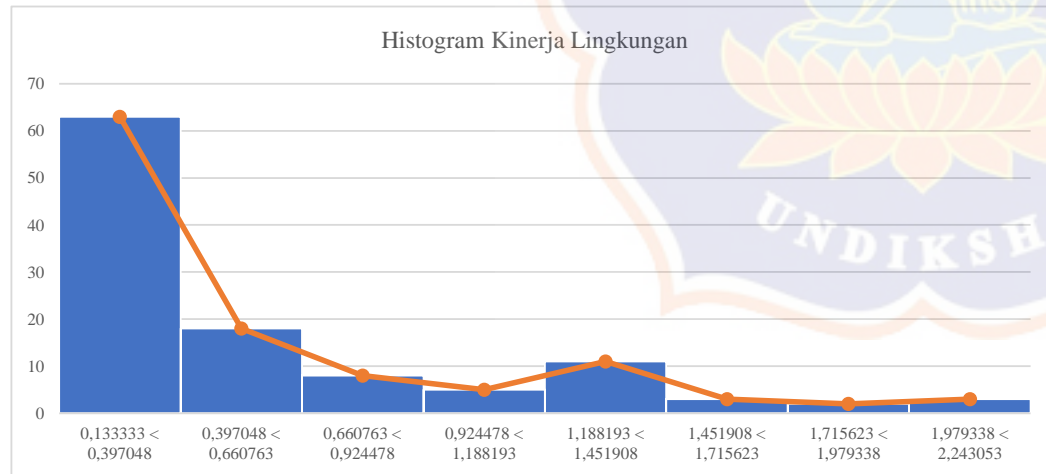


LAMPIRAN 10

Statistik Deskriptif Variabel Kinerja Lingkungan

STATISTIK DESKRIPTIF VARIABEL KINERJA LINGKUNGAN

Statistik Deskriptif	
Mean	0,541003
Standard Error	0,046471
Median	0,266667
Mode	0,200000
Standard Deviation	0,493992
Sample Variance	0,244028
Kurtosis	1,417398
Skewness	1,521080
Range	2,066667
Minimum	0,133333
Maximum	2,200000
Sum	61,133337
Count	113



Perhitungan Tabel Distribusi Frekuensi	
Jumlah Kelas (K)	7,836751217
Pembulatan K	8
Interval Kelas (Ci)	0,263715

Batas Kelas Bawah	Batas Kelas Atas
0,133333	0,397048
0,397048	0,660763
0,660763	0,924478
0,924478	1,188193
1,188193	1,451908
1,451908	1,715623
1,715623	1,979338
1,979338	2,243053

Tabel Distribusi Frekuensi	
Interval Kelas	Frekuensi
0,133333 < 0,397048	63
0,397048 < 0,660763	18
0,660763 < 0,924478	8
0,924478 < 1,188193	5
1,188193 < 1,451908	11
1,451908 < 1,715623	3
1,715623 < 1,979338	2
1,979338 < 2,243053	3
Total	113



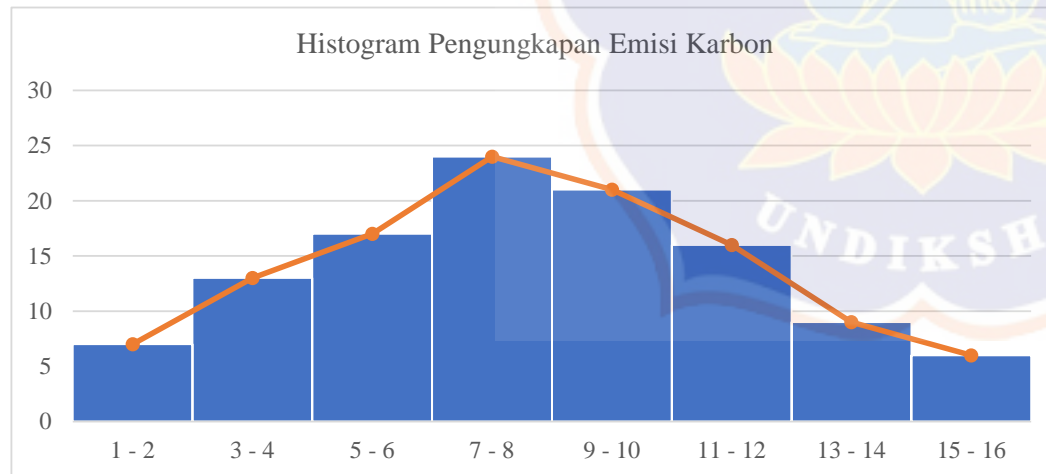


LAMPIRAN 11

Statistik Deskriptif Variabel Pengungkapan Emisi Karbon

STATISTIK DESKRIPTIF VARIABEL PENGUNGKAPAN EMISI KARBON

Statistik Deskriptif	
Mean	8,203540
Standard Error	0,341077
Median	8
Mode	8
Standard Deviation	3,625700
Sample Variance	13,145702
Kurtosis	-0,662616
Skewness	0,081054
Range	15
Minimum	1
Maximum	16
Sum	927
Count	113



Perhitungan Tabel Distribusi Frekuensi	
Jumlah Kelas (K)	7,836751217
Pembulatan K	8
Interval Kelas (Ci)	1,914058464
Pembulatan Ci	2

Batas Kelas Bawah	Batas Kelas Atas
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16

Tabel Distribusi Frekuensi	
Interval Kelas	Frekuensi
1 - 2	7
3 - 4	13
5 - 6	17
7 - 8	24
9 - 10	21
11 - 12	16
13 - 14	9
15 - 16	6
Total	113



Frekuensi Item Pengungkapan	
CC1	77
CC2	11
GHG1	64
GHG2	9
GHG3	90
GHG4	62
GHG5	38
GHG6	25
GHG7	74
EC1	102
EC2	51
EC3	80
RC1	92
RC2	13
RC3	54
RC4	1
ACC1	57
ACC2	27
Total	927





LAMPIRAN 12

Output Pengujian Hipotesis

OUTPUT PENGUJIAN HIPOTESIS

A. Output Analysis Outer Model

WarpPLS 7.0 - Indicator loadings and cross-loadings: View combined loadings and cross-loadings

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb	Type (as defined)	SE	P value
X_Ukuran_Peru (1.000)	0.000	0.000	0.000	0.000	Formative	0.083	<-0.001
M2_Kinerja_Ke	0.000	(1.000)	0.000	0.000	Formative	0.156	<-0.001
M2_Kinerja_Li	0.000	0.000	(1.000)	0.000	Formative	0.085	<-0.001
Y_Pengungkapa	0.000	0.000	0.000	(1.000)	Formative	0.056	<-0.001

Notes: Loadings are unrotated and cross-loadings are oblique-rotated. SEs and P values are for loadings. P values < 0.05 are desirable for reflective indicators.

WarpPLS 7.0 - Latent variable coefficients

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb
R-squared	0.035	0.038	0.305	
Adj. R-squared	0.025	0.030	0.296	
Composite reliab.	1.000	1.000	1.000	1.000
Cronbach's alpha	1.000	1.000	1.000	1.000
Avg. var. extrac.	1.000	1.000	1.000	1.000
Full collin. VIF	1.454	1.055	1.048	1.440
Q-squared	0.042	0.041	0.317	
Min	-2.780	-1.482	-0.825	-1.987
Max	1.850	4.065	3.358	2.150
Median	0.152	-0.248	-0.555	-0.056
Mode	-2.780	-1.482	-0.690	-0.056
Skewness	-0.818	2.896	1.501	0.080
Exc. kurtosis	0.674	7.879	1.303	-0.686
Unimodal-RS	Yes	Yes	Yes	Yes
Unimodal-KMV	Yes	Yes	Yes	Yes
Normal-JB	No	No	No	Yes
Normal-RJB	No	No	No	Yes
Histogram	View	View	View	View

Notes: Unimodal-RS = Rohtagyi-Székely test of unimodality; Unimodal-KMV = Klassen-Mokveld-van Es test of unimodality; Normal-JB = Jarque-Bera test of normality; Normal-RJB = robust Jarque-Bera test of normality; click on "View" cell to see corresponding histogram.

B. Output Analysis Inner Model



C. Output Pengujian Hipotesis Pengaruh Langsung (*Direct Effect*)



D. Output Pengujian Hipotesis Pengaruh Tidak Langsung (*Indirect Effect*)

WarpPLS 7.0 - Indirect and total effects (table view)

Close Help

----- Indirect and total effects (table view) -----

* Indirect and total effects *

Indirect effects for paths with 2 segments

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb
Ukur.Per				
Kin.Keu				
Kin.Ling				
Emi.Karb	0.027			

Number of paths with 2 segments

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb
Ukur.Per				
Kin.Keu				
Kin.Ling				
Emi.Karb	2			

P values of indirect effects for paths with 2 segments

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb
Ukur.Per				
Kin.Keu				
Kin.Ling				
Emi.Karb	0.068			

Standard errors of indirect effects for paths with 2 segments

WarpPLS 7.0 - Path coefficients and P values

Close Help

Path coefficients

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb
Ukur.Per				
Kin.Keu	-0.187			
Kin.Ling	0.195			
Emi.Karb	0.516	-0.095	0.045	

P values

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb
Ukur.Per				
Kin.Keu	0.023			
Kin.Ling	<0.001			
Emi.Karb	<0.001	0.084	0.257	

WarpPLS 7.0 - Standard errors and effect sizes for path coefficients

Close Help

Standard errors for path coefficients

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb
Ukur.Per				
Kin.Keu	0.093			
Kin.Ling	0.060			
Emi.Karb	0.064	0.069	0.068	

Effect sizes for path coefficients

	Ukur.Per	Kin.Keu	Kin.Ling	Emi.Karb
Ukur.Per				
Kin.Keu	0.035			
Kin.Ling	0.038			
Emi.Karb	0.280	0.019	0.007	

Sobel Test

Ukuran Perusahaan → Kinerja Keuangan → Pengungkapan Emisi Karbon

Kock_2013_MediationSobel.xls [Compatibility Mode] - Excel

File Home Insert Page Layout Formulas Data Review View Help Foxit PDF Nitro Pro Acrobat Tell me what you want to do

Assessing a mediating effect: Change the values in the yellow cells to obtain the values in the green cells

1 Assessing a mediating effect: Change the values in the yellow cells to obtain the values in the green cells

2

3 This spreadsheet implements the mediating effects tests discussed in the following publication using coefficients generated by WarpPLS:

4 - Kock, N. (2014). Advanced mediating effects tests, multi-group analyses, and measurement model assessments in PLS-based SEM. *International Journal of e-Collaboration*, 10(3), 1-13.

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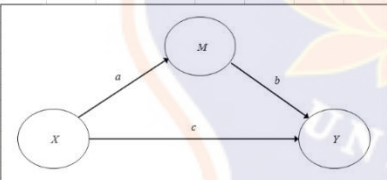
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Inputs

N	113	(Sample size)
a	-0.1870	(Path coefficient calculated by WarpPLS)
b	0.0930	(Path coefficient calculated by WarpPLS)
Sa	0.0930	(Standard error calculated by WarpPLS)
Sb	0.0690	(Standard error calculated by WarpPLS)

Outputs

Sab	0.0189	(Sobel's standard error for mediating effect)
ab	0.0178	(Product path coefficient for mediating effect)
Tab	1.0510	(T value for mediating effect)
Pab	0.1478	(P value for mediating effect, one-tailed)
Pab'	0.2956	(P value for mediating effect, two-tailed)

Sheet1

Sobel Test

Ukuran Perusahaan → Kinerja Lingkungan → Pengungkapan Emisi Karbon

Assessing a mediating effect: Change the values in the yellow cells to obtain the values in the green cells

This spreadsheet implements the mediating effects tests discussed in the following publication using coefficients generated by WarpPLS:
- Kock, N. (2014). Advanced mediating effects tests, multi-group analyses, and measurement model assessments in PLS-based SEM. *International Journal of e-Collaboration*, 10(3), 1-13.

Inputs

N	113	(Sample size)
a	0.1950	(Path coefficient calculated by WarpPLS)
b	0.0450	(Path coefficient calculated by WarpPLS)
Sa	0.0600	(Standard error calculated by WarpPLS)
Sb	0.0680	(Standard error calculated by WarpPLS)

Outputs

Sab	0.0141	(Sobel's standard error for mediating effect)
ab	0.0088	(Product path coefficient for mediating effect)
T_{ab}	0.6209	(T value for mediating effect)
P_{ab}	0.2680	(P value for mediating effect, one-tailed)
P_{ab}^*	0.5360	(P value for mediating effect, two-tailed)

The diagram shows a path from X to M (coefficient a), from M to Y (coefficient b), and a direct path from X to Y (coefficient c).

RIWAYAT HIDUP



Penulis lahir di Singaraja pada tanggal 14 Juni 1998. Penulis menyelesaikan pendidikan di SD Negeri 1 Banjar Jawa (lulus tahun 2010), SMP Negeri 6 Singaraja (lulus tahun 2013), SMA Negeri 4 Singaraja jurusan Matematika dan Ilmu Pengetahuan Alam Lintas Minat Ekonomi (lulus tahun 2016), Universitas Pendidikan Ganesha pada Program Studi S1 Akuntansi (lulus tahun 2020) dengan skripsi yang berjudul “Determinan Emisi Karbon Pada Sektor Industri dan Manufaktur”, dan Universitas Pendidikan Ganesha pada Program Studi S2 Akuntansi (lulus tahun 2022) dengan tesis yang berjudul “Ukuran Perusahaan, Kinerja Keuangan, Kinerja Lingkungan, dan Pengungkapan Emisi Karbon Pada Perusahaan Publik Non-Keuangan di Indonesia”. Sertifikasi CSRS (*Certified Sustainability Reporting Specialist*) diperoleh pada tahun 2021.

Beberapa penghargaan dan prestasi yang pernah ditorehkan penulis diantaranya: Lulusan Sarjana Dengan Predikat *Cumlaude* (2020), Lulusan Berprestasi Pamuncak dalam Wisuda ke-62 Universitas Pendidikan Ganesha (2020), Peserta Akselerasi *Startup* Mahasiswa Indonesia Kemenristekdikti di Jakarta (2019), Lolos Dana Hibah Kompetisi Bisnis Mahasiswa Indonesia (KBMI) (2019), Juara 2 *Accountnizer Writing Competition* Tingkat Nasional (2018), Finalis *Stock Analysis Competition* Tingkat Nasional (2018), Juara 3 Lomba Debat se-Universitas Pendidikan Ganesha (2018), Finalis 10 Besar Pemilihan Putra-Putri Universitas Pendidikan Ganesha (2018), Juara 1 PKM-M serangkaian DASA

(Development of Academic Sport and Art) (2018), Sebagai Putra *Accountnizer* pada Malam Penobatan Putra-Putri *Accountnizer* (2018), Sebagai *The Most Outstanding Student* dalam *Accounting Department Award* (2018), *Semifinalist Tirtayasa Research Competition and Festival* (2018), dan *Semifinalist The National Paper Competition of PRISMA* (2017).

Adapun pengalaman organisasi yang pernah digeluti penulis yakni: Tim Penyusun LKPS dan LED Akreditasi Program Studi S2 Akuntansi (2021-2022), Ketua Panitia Webinar LPD di Prodi S2 Akuntansi Undiksha (2021), Ketua Panitia Kuliah Umum Filsafat Ilmu Akuntansi di Prodi S2 Akuntansi Undiksha (2020), Ketua Panitia Kegiatan “GenBI Mengajar” di SD Negeri 2 Silangjana (2019), Anggota Divisi Pendidikan Generasi Baru Indonesia (GenBI) Provinsi Bali (2019-2020), dan Anggota Bidang Karya Tulis Ilmiah Unit Kegiatan Mahasiswa (UKM) Penalaran dan Karya Ilmiah Mahasiswa (2018-2019).

Artikel ilmiah yang pernah dipublikasikan penulis yaitu: 1) *A comprehensive study on the quality of sustainability reporting disclosure between Indonesia and other countries* (*Accounting*, Vol 8 Issue 1 Tahun 2021 – Terindeks Scopus Q3); 2) *Determinan Emisi Karbon Pada Sektor Industri dan Manufaktur* (*Jurnal Ilmiah Mahasiswa Akuntansi Undiksha*, Vol 11 No 2 Tahun 2020 - Terindeks Sinta 5); dan 3) *Efektifitas Penyelenggaraan Program Beasiswa Bidikmisi di Universitas Pendidikan Ganesha* (*Jurnal Ilmiah Akuntansi dan Humanika*, Vol 8 No 3 Tahun 2018 - Terindeks Sinta 4).