

APPENDICES

Appendix 1 List of Company

No	Company Code	Company Name
1	ICBP.JK	PT Indofood CBP Sukses Makmur Tbk
2	JAWA.JK	PT Jaya Agra Wattie Tbk
3	RANC.JK	PT Supra Boga Lestari Tbk
4	SKBM.JK	PT Sekar Bumi Tbk
5	PALM.JK	PT Provident Investasi Bersama Tbk
6	MAGP.JK	PT Multi Agro Gemilang Plantation Tbk
7	DSNG.JK	PT Dharma Satya Nusantara Tbk
8	SSMS.JK	PT Sawit Sumbermas Sarana Tbk
9	SIDO.JK	PT Industri Jamu & Farmasi Sido Muncul Tbk
10	DPUM.JK	PT Dua Putra Utama Makmur Tbk
11	KINO.JK	PT Kino Indonesia Tbk
12	CLEO.JK	PT Sariguna Primatirta Tbk
13	PCAR.JK	PT Prima Cakrawala Abadi Tbk
14	MGRO.JK	PT Mahkota Group Tbk
15	UCID.JK	PT Uni-Charm Indonesia Tbk
16	PMMP.JK	PT Panca Mitra Multiperdana Tbk
17	PNGO.JK	PT Pinago Utama Tbk
18	PGUN.JK	PT Pradiksi Gunatama Tbk
19	DMND.JK	PT Diamond Food Indonesia Tbk
20	CSRA.JK	PT Cisadane Sawit Raya Tbk
21	PSGO.JK	PT Palma Serasih Tbk
22	KEJU.JK	PT Mulia Boga Raya Tbk
23	ITIC.JK	PT Indonesia Tobacco Tbk
24	COCO.JK	PT Wahana Interfood Nusantara Tbk
25	BEEF.JK	PT Estika Tata Tiara Tbk
26	AALI.JK	PT Astra Agro Lestari Tbk
27	ADES.JK	PT Akasha Wira International Tbk
28	BISI.JK	PT Bisi International Tbk
29	BTEK.JK	PT Bumi Teknokultura Unggul Tbk
30	BUDI.JK	PT Budi Starch & Sweetener Tbk
31	CPIN.JK	PT Charoen Pokphand Indonesia Tbk
32	CPRO.JK	PT Central Proteina Prima Tbk
33	DLTA.JK	PT Delta Djakarta Tbk
34	DSFI.JK	PT Dharma Samudera Fishing Industries Tbk
35	FISH.JK	PT FKS Multi Agro Tbk
36	GGRM.JK	PT Gudang Garam Tbk
37	HERO.JK	PT Hero Supermarket Tbk

38	HMSP.JK	PT Hanjaya Mandala Sampoerna Tbk
39	IIKP.JK	PT Inti Agri Resources Tbk
40	INDF.JK	PT Indofood Sukses Makmur Tbk
41	JPFA.JK	PT Japfa Comfeed Indonesia Tbk
42	LSIP.JK	PT Perusahaan Perkebunan London Sumatra Indonesia Tbk
43	MAIN.JK	PT Malindo Feedmill Tbk
44	MRAT.JK	PT Mustika Ratu Tbk
45	MYOR.JK	PT Mayora Indah Tbk
46	SGRO.JK	PT Sampoerna Agro Tbk
47	SIPD.JK	PT Sreeya Sewu Indonesia
48	STTP.JK	PT Siantar Top Tbk
49	TCID.JK	PT Mandom Indonesia Tbk
50	ULTJ.JK	PT Ultrajaya Milk Industry & Trading Co Tbk
51	UNVR.JK	PT Unilever Indonesia Tbk
52	ROTI.JK	PT Nippon Indosari Corpindo Tbk
53	MIDI.JK	PT Midi Utama Indonesia Tbk
54	MBTO.JK	PT Martina Berto Tbk
55	SIMP.JK	PT Salim Ivomas Pratama Tbk
56	ALTO.JK	PT Tri Banyan Tirta Tbk
57	WIIM.JK	PT Wismilak Inti Makmur Tbk
58	ANJT.JK	PT Austindo Nusantara Jaya Tbk
59	GOLL.JK	PT Golden Plantation Tbk
60	HOKI.JK	PT Buyung Poetra Sembada Tbk
61	CAMP.JK	PT Campina Ice Cream Industry Tbk
62	TAPG.JK	PT Triputra Agro Persada Tbk
63	WMPP.JK	PT Widodo makmur Perkasa Tbk
64	ASHA.JK	PT Cilacap Samudera Fishing Industry Tbk
65	GULA.JK	PT Aman Agrindo Tbk
66	AMMS.JK	PT Agung Menjangan Mas Tbk
67	MKTR.JK	PT Menthobi Karyatama Raya Tbk
68	CBUT.JK	PT Citra Broneo Utama Tbk
69	CRAB.JK	PT Toba Surimi Industries Tbk
70	KLIN.JK	PT Klinko Karya Imaji Tbk
71	BUAH.JK	PT Segar Kumala Indonesia Tbk
72	EURO.JK	PT Estee Gold Feet Tbk
73	RAFI.JK	PT Sari Kreasi Boga Tbk
74	TRGU.JK	PT Cerestar Indonesia Tbk
75	DEWI.JK	PT Dewi SHRI Farmino Tbk
76	JARR.JK	PT Jhonlin Agro Raya Tbk
77	TLDN.JK	PT Teladan Prima Agro Tbk
78	STAA.JK	PT Sumber Tani Agung Resources
79	IPPE.JK	PT Indo Pureco Pratama Tbk
80	TAYS.JK	PT Jaya Swarasa Agung Tbk
81	CMRY.JK	PT Cisarua Mountain Diary Tbk
82	BOBA.JK	PT Formosa Ingredient Factory Tbk
83	OILS.JK	PT Indo Oil Perkasa Tbk
84	FLMC.JK	PT Falmaco Nonwoven Industri Tbk

85	WMUU.JK	PT Widodo Makmur Unggas Tbk
86	FAPA.JK	PT FAP Agri Tbk
87	VICI.JK	PT Victoria Care Indonesia Tbk
88	KMDS.JK	PT Kurniamitra Duta Sentosa Tbk
89	IKAN.JK	PT Era Mandiri Cemerlang Tbk
90	AGAR.JK	PT Asia Sejahtera Mina Tbk
91	FOOD.JK	PT Sentra Food Indonesia Tbk
92	GOOD.JK	PT Garudafood Putra Putri Jaya Tbk
93	ANDI.JK	PT Andira Agro Tbk
94	CEKA.JK	PT Wilmar Cahaya Indonesia Tbk
95	MLBI.JK	PT Multi Bintang Indonesia Tbk
96	MPPA.JK	PT Matahari Putra Prima Tbk
97	PSDN.JK	PT Prasadha Aneka Niaga Tbk
98	SKLT.JK	PT Sekar Laut Tbk
99	SMAR.JK	PT Sinar Mas Agro Resources & Technology Tbk
100	TBLA.JK	PT Tunas Baru Lampung Tbk
101	TGKA.JK	PT Tigaraksa Satria Tbk
102	UNSP.JK	PT Bakrie Sumatera Plantations Tbk
103	WAPO.JK	PT Wahana Pronatural Tbk
104	WICO.JK	PT Wicaksana Overseas International Tbk
105	GZCO.JK	PT Gozco Plantations Tbk
106	AMRT.JK	PT Sumber Alfaria Trijaya Tbk
107	BWPT.JK	PT Eagle High Plantations Tbk
108	BEER.JK	PT Jobubu Jarum Minahasa Tbk
109	WINE.JK	PT Hatten Bali Tbk
110	NAYZ.JK	PT Hassana Boga Sejahtera Tbk
111	NSSS.JK	PT Nusantara Sawit Sejahtera Tbk
112	MAXI.JK	PT Maxindo Karya Anugerah Tbk
113	STRK.JK	PT Lovina Beach Brewery Tbk
114	IKPM.JK	PT Ikapharmindo Putramas Tbk
115	AYAM.JK	PT Janu Putra Sejahtera Tbk

Appendix 2 Descriptive Statistic

	Mean	Median	Minimum	Maximum	Std. Dev.
LogAudit	7,2159	8,6937	0,00000	10,452	3,4769
EM	0,11746	0,073394	0,00037100	3,8785	0,21808
ESGScore	12,574	13,360	0,00000	41,170	10,303
LNAsset	26,545	28,332	0,00000	32,820	7,0214
ExternalAuditor	0,34348	0,00000	0,00000	1,0000	0,47539
LeverageDERatio	2,9487	0,86670	-21,934	435,14	21,215

Appendix 3 Initial Ordinary Least Squares

Model 1: Pooled OLS, using 460 observations
Included 115 cross-sectional units
Time-series length = 4
Dependent variable: LogAudit

	coefficient	std. error	t-ratio	p-value	
const	-0,102703	0,428142	-0,2399	0,8105	
EM	-0,528216	0,536700	-0,9842	0,3255	
ESGScore	0,120786	0,0140778	8,580	1,52e-016	***
CCxESG	0,165785	0,0872459	1,900	0,0580	*
LNAsset	0,195951	0,0174801	11,21	6,59e-026	***
ExternalAuditor	1,37608	0,244468	5,629	3,18e-08	***
LeverageDERatio	-0,000284250	0,00510715	-0,05566	0,9556	
Mean dependent var	7,215906	S.D. dependent var	3,476945		
Sum squared resid	2422,707	S.E. of regression	2,312605		
R-squared	0,563391	Adjusted R-squared	0,557608		
F(6, 453)	97,42362	P-value(F)	2,51e-78		
Log-likelihood	-1034,837	Akaike criterion	2083,674		
Schwarz criterion	2112,593	Hannan-Quinn	2095,062		
rho	0,622053	Durbin-Watson	0,620255		

Excluding the constant, p-value was highest for variable 19 (LeverageDERatio)

Appendix 4 White Test Heteroscedasticity

White's test for heteroskedasticity

OLS, using 460 observations

Dependent variable: uhat^2

Omitted due to exact collinearity: X2_X3

	coefficient	std. error	t-ratio	p-value	
const	-0,548566	1,17949	-0,4651	0,6421	
EM	13,7925	18,8422	0,7320	0,4646	
ESGScore	-0,934945	0,531496	-1,759	0,0793	*
CCxESG	1,28297	3,62280	0,3541	0,7234	
LNAsset	0,618473	0,267664	2,311	0,0213	**
ExternalAuditor	7,47896	11,0584	0,6763	0,4992	
LeverageDERatio	1,09557	1,34593	0,8140	0,4161	
sq_EM	0,229550	0,883874	0,2597	0,7952	
X2_X4	0,937751	2,39761	0,3911	0,6959	
X2_X5	-0,686498	0,725558	-0,9462	0,3446	
X2_X6	-31,4024	12,5135	-2,509	0,0125	**
X2_X7	-1,41154	1,21685	-1,160	0,2467	
sq_ESGScore	0,0341029	0,00412909	8,259	1,79e-015	***
X3_X4	0,0583699	0,0541599	1,078	0,2818	
X3_X5	-0,0275273	0,0197180	-1,396	0,1634	
X3_X6	0,313901	0,0993558	3,159	0,0017	***
X3_X7	-0,0110184	0,0109917	-1,002	0,3167	
sq_CCxESG	-0,0669167	0,127435	-0,5251	0,5998	
X4_X5	-0,0734969	0,129410	-0,5679	0,5704	
X4_X6	1,96329	0,833027	2,357	0,0189	**
X4_X7	0,0529363	0,0749557	0,7062	0,4804	
sq_LNAsset	0,00435806	0,00981586	0,4440	0,6573	
X5_X6	-0,515302	0,379469	-1,358	0,1752	
X5_X7	-0,0300190	0,0486340	-0,6172	0,5374	
X6_X7	0,0714278	0,0826696	0,8640	0,3881	
sq_LeverageDERat~	6,15167e-05	0,000464540	0,1324	0,8947	

Unadjusted R-squared = 0,737096

Test statistic: $TR^2 = 339,064072$,

with p-value = $P(\text{Chi-square}(25) > 339,064072) = 0,000000$

Appendix 5 Multicollinearity Test

Variance Inflation Factors

Minimum possible value = 1.0

Values > 10.0 may indicate a collinearity problem

EM	1,176
ESGScore	1,806
CCxESG	1,572
LNAsset	1,293
ExternalAuditor	1,159
LeverageDERatio	1,008

$VIF(j) = 1/(1 - R(j)^2)$, where $R(j)$ is the multiple correlation coefficient between variable j and the other independent variables

Appendix 6 Panel Specification

Diagnostics: using n = 115 cross-sectional units

Fixed effects estimator

allows for differing intercepts by cross-sectional unit

	coefficient	std. error	t-ratio	p-value	
const	2,55308	0,803515	3,177	0,0016	***
EM	0,512118	0,439239	1,166	0,2445	
ESGScore	0,0147257	0,0539199	0,2731	0,7849	
OCxESG	-0,0371568	0,0720807	-0,5155	0,6065	
LNAsset	0,130807	0,0155052	8,436	9,60e-016	***
ExternalAuditor	2,89813	0,570297	5,082	6,19e-07	***
LeverageDERatio	-0,00271739	0,00405211	-0,6706	0,5029	

Residual variance: 849,209/(460 - 121) = 2,50504

Joint significance of differing group means:

F(114, 339) = 5,50994 with p-value 1,24948e-034

(A low p-value counts against the null hypothesis that the pooled OLS model is adequate, in favor of the fixed effects alternative.)

Variance estimators:

between = 2,63929

within = 2,50504

theta used for quasi-demeaning = 0,562076

Random effects estimator

allows for a unit-specific component to the error term

	coefficient	std. error	t-ratio	p-value	
const	0,806944	0,426406	1,892	0,0591	*
EM	0,192016	0,430595	0,4459	0,6559	
ESGScore	0,130914	0,0180080	7,270	1,59e-012	***
OCxESG	0,0228532	0,0705052	0,3241	0,7460	
LNAsset	0,153573	0,0148362	10,35	1,11e-022	***
ExternalAuditor	1,87248	0,328020	5,708	2,06e-08	***
LeverageDERatio	-0,00186241	0,00400631	-0,4649	0,6422	

Breusch-Pagan test statistic:

LM = 162,529 with p-value = prob(chi-square(1) > 162,529) = 3,17109e-037

(A low p-value counts against the null hypothesis that the pooled OLS model is adequate, in favor of the random effects alternative.)

Hausman test statistic:

H = 27,0157 with p-value = prob(chi-square(6) > 27,0157) = 0,000143828

(A low p-value counts against the null hypothesis that the random effects model is consistent, in favor of the fixed effects model.)

Appendix 7 Weighted Least Squares

Model 3: WLS, using 460 observations
 Included 115 cross-sectional units
 Dependent variable: LogAudit
 Weights based on per-unit error variances

	coefficient	std. error	t-ratio	p-value	
const	0,567902	0,326297	1,740	0,0825	*
EM	-1,18321	0,561835	-2,106	0,0358	**
ESGScore	0,0418599	0,00659629	6,346	5,37e-010	***
CCxESG	0,0879347	0,0344854	2,550	0,0111	**
LNAsset	0,245808	0,0122776	20,02	2,44e-064	***
ExternalAuditor	0,754989	0,0627605	12,03	4,07e-029	***
LeverageDERatio	0,000558596	0,000487429	1,146	0,2524	

Statistics based on the weighted data:

Sum squared resid	293,4211	S.E. of regression	0,804816
R-squared	0,674372	Adjusted R-squared	0,670059
F(6, 453)	156,3596	P-value (F)	5,1e-107
Log-likelihood	-549,2996	Akaike criterion	1112,599
Schwarz criterion	1141,518	Hannan-Quinn	1123,987