

RUNS TEST / UJI LARIAN

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) \cdot n^2$	$ER = \frac{N(N+1) - n^2}{N}$	$ni^3 = \frac{1}{3}n^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2	Z
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Astra Agro Lestari	JUMLAH BARIS				(2 + 3 + 4)	(1) + 1	(1) * (6)	$(2)^2 + (3)^2 + (4)^2$	(7) - (8)	(9) / (1)	$(2)^3 + (3)^3 + (4)^3$	$(1)^3$	(1) - 1	$(1)^2 * (13)$	$(8) * (8+7) - 2 * (1) * (11) - (12) / (14)$	Akar Pangkat (15)	(5) - (10)	$IF (17) < 0 = (17) \cdot 0.5, IF (17) > 0 = (17) + 0.5$	(18) / (16)
2	Astra Tambang																			
3	Astra Graphia																			
4	Astra Internasional																			
5	Bank Negara Indonesia																			
6	Bhakti Investama																			
7	Berlian Laju Tanker																			
8	Bimantara Citra																			
9	Citra Marga Nusapala																			
10	Dankos Laboratories																			
11	Gudang Garam																			
12	Gajah Tunggal																			
13	Great River																			
14	HM Sampoerna																			
15	Indofood Sukses Makmur																			
16	Indorama Sintetic																			
17	Indocement Tunggal																			
18	Indosat																			
19	Lippo Bank																			
20	Medco Energi																			
21	Multipolar																			
22	Matahari Putra Prima																			
23	Metrodata Electronics																			
24	Ramayana Lestari																			
25	Bentoel Internasional																			
26	Semen Cibinong																			
27	Semen Gresik																			
28	Telekomunikasi Ind.																			
29	Tunas Ridean																			
30	United Tractors																			

**Tabel 4.1**  
**Hasil Uji Larian**  
**Periode Mei 1998 - Desember 2002**

NO.	NAMA	R Larian Sebenarnya	ER = $\frac{N(N+1) - n1^2}{N}$ Larian Diharapkan	S (R) Standart Deviasi	Z Hitung
1	Astra Agro Lestari	166.00	201.78	5.10	-7.12
2	Aneka Tambang	158.00	206.28	4.87	-10.02
3	Astra Graphia	134.00	215.75	4.18	-19.68
4	Astra Internasional	141.00	210.63	4.43	-15.84
5	Bank Negara Indonesia	131.00	216.56	4.09	-21.02
6	Bhakti Investama	147.00	210.81	4.55	-14.13
7	Berlian Laju Tanker	154.00	207.86	4.75	-11.44
8	Bimantara Citra	151.00	208.66	4.67	-12.45
9	Citra Marga Nusapala	144.00	212.09	4.47	-15.36
10	Dankos Laboratories	155.00	206.71	4.78	-10.92
11	Gudang Garam	138.00	210.63	4.38	-16.70
12	Gajah Tunggal	145.00	211.20	4.50	-14.83
13	Great River	134.00	215.38	4.18	-19.59
14	HM Sampoerna	153.00	205.69	4.74	-11.21
15	Indofood Sukses	141.00	211.95	4.39	-16.27
16	Indorama Sintetic	136.00	215.23	4.23	-18.83
17	Indocement Tunggal	146.00	210.98	4.52	-14.47
18	Indosat	128.00	215.03	4.09	-21.39
19	Lippo Bank	100.00	226.63	3.17	-40.09
20	Medco Energi	152.00	208.04	4.70	-12.03
21	Multipolar	153.00	208.38	4.73	-11.83
22	Matahari Putra Prima	145.00	211.75	4.49	-14.96
23	Metrodata Electronics	115.00	222.50	3.61	-29.88
24	Ramayana Lestari	149.00	207.73	4.64	-12.77
25	Duta Pertiwi	95.00	227.33	3.01	-44.19
26	Semen Cibinong	127.00	218.38	3.97	-23.13
27	Semen Gresik	143.00	210.42	4.47	-15.20
28	Telekomunikasi Ind.	135.00	214.05	4.23	-18.79
29	Tunas Ridean	141.00	213.25	4.38	-16.61
30	United Tractors	148.00	210.31	4.58	-13.71

**Z Hitung > Z Tabel**



SIGNIFIKAN	Z Tabel
5%	1.96



HO Ditolak
'--> Pergerakan Harga Saham TIDAK RANDOM
--> PASARAN SAHAM BEJ TIDAK EFISIEN

Keterangan :

\* Signifikan pada level 1 %

\*\* Signifikan pada level 5 %

**Tabel 4.2**  
**Hasil Uji Larian**  
**Periode 21 Mei 1998 - 19 Oktober 1999 ( Periode HABIBIE )**

NO.	NAMA	R Larian Sebenarnya	ER = $\frac{N(N+1) - n1^2}{N}$ Larian Diharapkan	S ( R ) Standart Deviasi	Z Hitung
1	Astra Agro Lestari	47.00	64.58	2.52	#VALUE!
2	Astra Tambang	46.00	65.30	2.45	#VALUE!
3	Astra Graphia	34.00	69.65	1.77	#VALUE!
4	Astra Internasional	43.00	66.45	2.29	#VALUE!
5	Bank Negara Indonesia	46.00	65.14	2.45	#VALUE!
6	Bhakti Investama	47.00	64.50	2.51	#VALUE!
7	Berlian Laju Tanker	55.00	61.26	2.95	-2.29 *
8	Bimantara Citra	52.00	62.76	2.78	#VALUE!
9	Citra Marga Nusapala	41.00	66.99	2.18	#VALUE!
10	Dankos Laboratories	45.00	65.80	2.40	#VALUE!
11	Gudang Garam	40.00	66.38	2.20	#VALUE!
12	Gajah Tunggal	43.00	66.53	2.29	#VALUE!
13	Great River	39.00	67.80	2.07	#VALUE!
14	HM Sampoerna	47.00	63.50	2.55	#VALUE!
15	Indofood Sukses	39.00	67.42	2.10	#VALUE!
16	Indorama Sintetic	47.00	64.77	2.51	#VALUE!
17	Indocement Tunggal	48.00	64.38	2.56	#VALUE!
18	Indosat	47.00	63.15	2.57	#VALUE!
19	Lippo Bank	41.00	67.42	2.17	#VALUE!
20	Medco Energi	45.00	64.23	2.46	#VALUE!
21	Multipolar	46.00	65.03	2.45	#VALUE!
22	Matahari Putra Prima	45.00	65.69	2.40	#VALUE!
23	Metrodata Electronics	19.00	73.34	0.66	-83.47

24	Ramayana Lestari	44.00	65.62	2.36	#VALUE!
25	Duta Pertiwi	35.00	69.31	1.83	#VALUE!
26	Semen Cibinong	35.00	69.31	1.83	#VALUE!
27	Semen Gresik	44.00	65.62	2.36	#VALUE!
28	Telekomunikasi Ind.	35.00	69.04	1.85	#VALUE!
29	Tunas Ridean	41.00	67.39	2.17	#VALUE!
30	United Tractors	45.00	65.77	2.40	#VALUE!

Keterangan : \* Signifikan pada level = 1 %

**Z Hitung > Z Tabel**



SIGNIFIKAN	Z Tabel
5%	1.96

**HO Ditolak**

'--> Pergerakan Harga Saham  
TIDAK RANDOM  
--> PASARAN SAHAM BEJ  
TIDAK EFISIEN

Keterangan :

\* Signifikan pada level 1 %

\*\* Signifikan pada level 5 %

**Tabel 4.3**

**Hasil Uji Larian**

Periode 20 Oktober 1999 - 22 Juli 2001 ( Periode GUSDUR )

NO.	NAMA	R  Larian Sebenarnya	ER = $\frac{N(N+1) - n1^2}{N}$  Larian Diharapkan	S ( R )  Standart Deviasi	Z Hitung
1	Astra Agro Lestari	69.00	73.77	3.35	-1,58 **
2	Astra Tambang	59.00	79.07	2.87	-7.16
3	Astra Graphia	52.00	81.43	2.55	-11.74
4	Astra Internasional	59.00	77.00	2.93	-6.31
5	Bank Negara Indonesia	49.00	82.71	2.40	-14.29
6	Bhakti Investama	50.00	82.73	2.43	-13.67
7	Berlian Laju Tanker	53.00	81.53	2.58	-11.26
8	Bimantara Citra	52.00	81.78	2.54	-11.94
9	Citra Marga Nusapala	52.00	81.91	2.53	-12.01
10	Dankos Laboratories	61.00	77.62	2.96	-5.78
11	Gudang Garam	55.00	79.15	2.74	-9.01
12	Gajah Tunggal	62.00	77.80	3.02	-5.40
13	Great River	59.00	78.89	2.87	-7.10

14	HM Sampoerna	52.00	80.33	2.60	-11.07
15	Indofood Sukses	57.00	79.64	2.78	-8.32
16	Indorama Sintetic	58.00	79.23	2.82	-7.69
17	Indocement Tunggal	59.00	79.13	2.87	-7.18
18	Indosat	61.00	75.70	2.98	-5.10
19	Lippo Bank	29.00	88.43	1.33	-44.93
20	Medco Energi	63.00	77.18	3.07	-4.78
21	Multipolar	54.00	81.25	2.63	-10.56
22	Matahari Putra Prima	57.00	80.01	2.78	-8.47
23	Metrodata Electronics	56.00	80.13	2.73	-9.02
24	Ramayana Lestari	57.00	78.76	2.81	-7.93
25	Duta Pertiwi	60.00	78.79	2.92	-6.60
26	Semen Cibinong	57.00	79.48	2.78	-8.25
27	Semen Gresik	55.00	79.48	2.72	-9.18
28	Telekomunikasi Ind.	57.00	79.68	2.78	-8.33
29	Tunas Ridean	56.00	80.46	2.73	-9.15
30	United Tractors	61.00	77.90	2.97	-5.85

**Z Hitung > Z Tabel**



SIGNIFIKAN	Z Tabel
5%	1.96

**HO Ditolak**  
 --> Pergerakan Harga Saham  
**TIDAK RANDOM**  
 --> PASARAN SAHAM BEJ  
**TIDAK EFISIEN**

Keterangan :

\* Signifikan pada level 1 %

\*\* Signifikan pada level 5 %

**Tabel 4.4**

**Hasil Uji Larian**

**Periode 23 Juli 2001 - 31 Des 2002 ( Periode MEGAWATI )**

NO.	NAMA	R  Larian Sebenarnya	ER = $\frac{N(N+1) - n1^2}{N}$  Larian Diharapkan	S ( R )  Standart Deviasi	Z Hitung
1	Astra Agro Lestari	50.00	64.67	2.65	-5.71
2	Astra Tambang	53.00	63.45	2.82	-3.88
3	Astra Graphia	48.00	65.20	2.55	-6.93

4	Astra Internasional	39.00	68.52	2.09	-14.40
5	Bank Negara Indonesia	36.00	70.21	1.87	-18.59
6	Bhakti Investama	50.00	64.85	2.66	-5.78
7	Berlian Laju Tanker	46.00	66.48	2.44	-8.60
8	Bimantara Citra	47.00	65.64	2.50	-7.66
9	Citra Marga Nusapala	51.00	64.36	2.71	-5.11
10	Dankos Laboratories	49.00	64.95	2.61	-6.31
11	Gudang Garam	43.00	66.92	2.30	-10.61
12	Gajah Tunggai	40.00	68.35	2.12	-13.63
13	Great River	36.00	69.73	1.90	-17.98
14	HM Sampoerna	54.00	62.21	2.86	-3.05
15	Indofood Sukses	45.00	66.49	2.38	-9.23
16	Indorama Sintetic	31.00	71.67	1.56	-26.33
17	Indocement Tunggai	39.00	67.93	2.13	-13.83
18	Indosat	20.00	73.84	0.85	-64.03
19	Lippo Bank	30.00	71.65	1.54	-27.46
20	Medco Energi	44.00	67.25	2.33	-10.19
21	Multipolar	53.00	63.35	2.82	-3.85
22	Matahari Putra Prima	43.00	67.64	2.27	-11.06
23	Metrodata Electronics	40.00	68.83	2.10	-13.95
24	Ramayana Lestari	48.00	65.25	2.56	-6.95
25	Duta Pertiwi	52.00	63.81	2.76	-4.45
26	Semen Cibinong	35.00	70.52	1.81	-19.92
27	Semen Gresik	44.00	67.12	2.33	-10.12
28	Telekomunikasi Ind.	43.00	66.81	2.30	-10.58
29	Tunas Ridean	44.00	67.07	2.33	-10.10
30	United Tractors	42.00	68.13	2.21	-12.03

**Z Hitung > Z Tabel**



SIGNIFIKAN	Z Tabel
5%	1.96

**HO Ditolak**  
 --> Pergerakan Harga Saham  
 TIDAK RANDOM  
 --> PASARAN SAHAM BEJ  
 TIDAK EFISIEN

Keterangan :

\* Signifikan pada level 1 %

\*\* Signifikan pada level 5 %

**Tabel 4.1**

**Hasil Uji Larian**

**Periode Januari 1998 - Desember 2002**

NO.	NAMA	R Larian Sebenarnya	ER = $\frac{N(N+1) - n1^2}{N}$ Larian Diharapkan	S ( R ) Standart Deviasi	Z Hitung
1	Astra Agro Lestari	177.00	218.37	5.24	#VALUE!
2	Astra Tambang	173.00	221.44	5.13	#VALUE!
3	Astra Graphia	144.00	233.01	4.33	#VALUE!
4	Astra Internasional	155.00	226.10	4.68	#VALUE!
5	Bank Negara Indonesia	140.00	234.15	4.22	#VALUE!
6	Bhakti Investama	164.00	225.23	4.88	#VALUE!
7	Berlian Laju Tanker	169.00	223.15	5.02	#VALUE!
8	Bimantara Citra	165.00	224.26	4.92	#VALUE!
9	Citra Marga Nusapala	157.00	228.14	4.69	#VALUE!
10	Dankos Laboratories	168.00	222.90	4.99	#VALUE!
11	Gudang Garam	151.00	226.32	4.61	#VALUE!
12	Gajah Tunggal	157.00	227.69	4.69	#VALUE!
13	Great River	147.00	231.19	4.42	#VALUE!
14	HM Sampoerna	166.00	221.19	4.97	#VALUE!
15	Indofood Sukses	152.00	228.75	4.57	#VALUE!
16	Indorama Sintetic	151.00	230.58	4.52	#VALUE!
17	Indocement Tunggol	157.00	227.99	4.69	#VALUE!
18	Indosat	143.00	230.15	4.38	#VALUE!
19	Lippo Bank	111.00	243.66	3.39	#VALUE!
20	Medco Energi	166.00	223.50	4.94	#VALUE!
21	Multipolar	159.00	227.30	4.75	#VALUE!
22	Matahari Putra Prima	154.00	229.44	4.61	#VALUE!
23	Metrodata Electronics	122.00	240.77	3.70	#VALUE!
24	Ramayana Lestari	159.00	224.91	4.78	#VALUE!
25	Duta Pertiwi	106.00	245.41	3.23	-43.32
26	Semen Cibinong	138.00	235.28	4.16	#VALUE!
27	Semen Gresik	150.00	228.95	4.53	#VALUE!
28	Telekomunikasi Ind.	145.00	230.98	4.39	#VALUE!
29	Tunas Ridean	156.00	228.56	4.66	#VALUE!
30	United Tractors	161.00	226.35	4.80	#VALUE!

**Z Hitung > Z Tabel**



SIGNIFIKAN	Z Tabel

**HO Ditolak**

'--> Pergerakan Harga Saham

**RUNS TEST / UJI LARIAN**  
**JANUARY 1998 - DESEMBER 2002**

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n^2$	$ER = \frac{N(N+1) - n^2}{N}$	$n^3 = (+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2 (N - 1)$	$S (R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2
1	Astra Agro Lestari	259.00	67.00	66.00	44.00	177.00	260.00	67,340.00	10,781.00	56,559.00	218.37	673,443.00	17,373,979.00	258.00	17,306,898.00	27.50	5.24	-41.37	#VALUE!
2	Astra Tambang	259.00	59.00	59.00	55.00	173.00	260.00	67,340.00	9,987.00	57,353.00	221.44	577,133.00	17,373,979.00	258.00	17,306,898.00	26.34	5.13	-48.44	#VALUE!
3	Astra Graphia	259.00	50.00	53.00	41.00	144.00	260.00	67,340.00	6,990.00	60,350.00	233.01	342,798.00	17,373,979.00	258.00	17,306,898.00	18.76	4.33	-89.01	#VALUE!
4	Astra Internasional	259.00	63.00	63.00	29.00	155.00	260.00	67,340.00	8,779.00	58,561.00	226.10	524,483.00	17,373,979.00	258.00	17,306,898.00	21.91	4.68	-71.10	#VALUE!
5	Bank Negara Indonesia	259.00	46.00	38.00	56.00	140.00	260.00	67,340.00	6,696.00	60,644.00	234.15	327,824.00	17,373,979.00	258.00	17,306,898.00	17.83	4.22	-94.15	#VALUE!
6	Bhakti Investama	259.00	55.00	50.00	59.00	164.00	260.00	67,340.00	9,006.00	58,334.00	225.23	496,754.00	17,373,979.00	258.00	17,306,898.00	23.86	4.88	-61.23	#VALUE!
7	Berlian Laju Tanker	259.00	56.00	53.00	60.00	169.00	260.00	67,340.00	9,545.00	57,795.00	223.15	540,493.00	17,373,979.00	258.00	17,306,898.00	25.22	5.02	-54.15	#VALUE!
8	Bimantara Citra	259.00	60.00	61.00	44.00	165.00	260.00	67,340.00	9,257.00	58,083.00	224.26	528,165.00	17,373,979.00	258.00	17,306,898.00	24.16	4.92	-59.26	#VALUE!
9	Citra Marga Nusapala	259.00	49.00	51.00	57.00	157.00	260.00	67,340.00	8,251.00	59,089.00	228.14	435,493.00	17,373,979.00	258.00	17,306,898.00	22.00	4.69	-71.14	#VALUE!
10	Dankos Laboratories	259.00	56.00	46.00	66.00	168.00	260.00	67,340.00	9,608.00	57,732.00	222.90	560,448.00	17,373,979.00	258.00	17,306,898.00	24.94	4.99	-54.90	#VALUE!



**RUNS TEST / UJI LARIAN**  
**JANUARY 1998 - DESEMBER 2002**

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n^2$	$ER = \frac{N(N + 1) - n^2}{N}$	$ni^3 = +)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2
11	Gudang Garam	259.00	65.00	63.00	23.00	151.00	260.00	67,340.00	8,723.00	58,617.00	226.32	536,839.00	17,373,979.00	258.00	17,306,898.00	21.27	4.61	-75.32	#VALUE!
12	Gajah Tunggal	259.00	45.00	50.00	62.00	157.00	260.00	67,340.00	8,369.00	58,971.00	227.69	454,453.00	17,373,979.00	258.00	17,306,898.00	22.00	4.69	-70.69	#VALUE!
13	Great River	259.00	44.00	41.00	62.00	147.00	260.00	67,340.00	7,461.00	59,879.00	231.19	392,433.00	17,373,979.00	258.00	17,306,898.00	19.50	4.42	-84.19	#VALUE!
14	HM Sampoerna	259.00	72.00	62.00	32.00	166.00	260.00	67,340.00	10,052.00	57,288.00	221.19	644,344.00	17,373,979.00	258.00	17,306,898.00	24.66	4.97	-55.19	#VALUE!
15	Indofood Sukses	259.00	62.00	55.00	35.00	152.00	260.00	67,340.00	8,094.00	59,246.00	228.75	447,578.00	17,373,979.00	258.00	17,306,898.00	20.88	4.57	-76.75	#VALUE!
16	Indorama Sintetic	259.00	51.00	47.00	53.00	151.00	260.00	67,340.00	7,619.00	59,721.00	230.58	385,351.00	17,373,979.00	258.00	17,306,898.00	20.46	4.52	-79.58	#VALUE!
17	Indocement Tunggal	259.00	47.00	59.00	51.00	157.00	260.00	67,340.00	8,291.00	59,049.00	227.99	441,853.00	17,373,979.00	258.00	17,306,898.00	22.00	4.69	-70.99	#VALUE!
18	Indosat	259.00	59.00	61.00	23.00	143.00	260.00	67,340.00	7,731.00	59,609.00	230.15	444,527.00	17,373,979.00	258.00	17,306,898.00	19.23	4.38	-87.15	#VALUE!
19	Lippo Bank	259.00	34.00	31.00	46.00	111.00	260.00	67,340.00	4,233.00	63,107.00	243.66	166,431.00	17,373,979.00	258.00	17,306,898.00	11.52	3.39	-132.66	#VALUE!
20	Medco Energi	259.00	63.00	61.00	42.00	166.00	260.00	67,340.00	9,454.00	57,886.00	223.50	551,116.00	17,373,979.00	258.00	17,306,898.00	24.45	4.94	-57.50	#VALUE!



*RUNS TEST / UJI LARIAN*  
*MEI 1998 - DESEMBER 2002*

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N+1) - n1^2}{N}$	$ni^2 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	$R - E (R) +/- 1/2$	Z
1	Astra Agro Lestari	240.00	62.00	61.00	43.00	166.00	241.00	57,840.00	9,414.00	48,426.00	201.78	544,816.00	13,824,000.00	239.00	13,766,400.00	25.99	5.10	-35.78	-36.28	-7.12
2	Astra Tambang	240.00	62.00	61.00	38.00	161.00	241.00	57,840.00	9,009.00	48,831.00	203.46	520,181.00	13,824,000.00	239.00	13,766,400.00	24.61	4.96	-42.46	-42.96	-8.66
3	Astra Graphia	240.00	63.00	63.00	40.00	166.00	241.00	57,840.00	9,538.00	48,302.00	201.26	564,094.00	13,824,000.00	239.00	13,766,400.00	26.01	5.10	-35.26	-35.76	-7.01
4	Astra Internasional	240.00	62.00	61.00	41.00	164.00	241.00	57,840.00	9,246.00	48,594.00	202.48	534,230.00	13,824,000.00	239.00	13,766,400.00	25.43	5.04	-38.48	-38.98	-7.73
5	Bank Negara Indonesia	240.00	65.00	63.00	40.00	168.00	241.00	57,840.00	9,794.00	48,046.00	200.19	588,672.00	13,824,000.00	239.00	13,766,400.00	26.59	5.16	-32.19	-32.69	-6.34
6	Bhakti Investama	240.00	60.00	61.00	38.00	159.00	241.00	57,840.00	8,765.00	49,075.00	204.48	497,853.00	13,824,000.00	239.00	13,766,400.00	24.04	4.90	-45.48	-45.98	-9.38
7	Berlian Laju Tanker	240.00	60.00	61.00	39.00	160.00	241.00	57,840.00	8,842.00	48,998.00	204.16	502,300.00	13,824,000.00	239.00	13,766,400.00	24.31	4.93	-44.16	-44.66	-9.06
8	Bimantara Citra	240.00	63.00	60.00	39.00	162.00	241.00	57,840.00	9,090.00	48,750.00	203.13	525,366.00	13,824,000.00	239.00	13,766,400.00	24.87	4.99	-41.13	-41.63	-8.35
9	Citra Marga Nusapala	240.00	63.00	62.00	38.00	163.00	241.00	57,840.00	9,257.00	48,583.00	202.43	543,247.00	13,824,000.00	239.00	13,766,400.00	25.17	5.02	-39.43	-39.93	-7.96
10	Dankos Laboratories	240.00	63.00	61.00	39.00	163.00	241.00	57,840.00	9,211.00	48,629.00	202.62	536,347.00	13,824,000.00	239.00	13,766,400.00	25.16	5.02	-39.62	-40.12	-8.00

RUNS TEST / UJI LARIAN

MEI 1998 - DESEMBER 2002

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N + 1) - n1^2}{N}$	$ni^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2 (N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2	Z
11	Gudang Garam	240.00	61.00	60.00	41.00	162.00	241.00	57,840.00	9,002.00	48,838.00	203.49	511,902.00	13,824,000.00	239.00	13,766,400.00	24.86	4.99	-41.49	-41.99	-8.42
12	Gajah Tunggal	240.00	63.00	64.00	38.00	165.00	241.00	57,840.00	9,509.00	48,331.00	201.38	567,063.00	13,824,000.00	239.00	13,766,400.00	25.74	5.07	-36.38	-36.88	-7.27
13	Great River	240.00	64.00	63.00	36.00	163.00	241.00	57,840.00	9,361.00	48,479.00	202.00	558,847.00	13,824,000.00	239.00	13,766,400.00	25.21	5.02	-39.00	-39.50	-7.87
14	HM Sampoerna	240.00	59.00	59.00	42.00	160.00	241.00	57,840.00	8,726.00	49,114.00	204.64	484,846.00	13,824,000.00	239.00	13,766,400.00	24.28	4.93	-44.64	-45.14	-9.16
15	Indofood Sukses	240.00	61.00	60.00	41.00	162.00	241.00	57,840.00	9,002.00	48,838.00	203.49	511,902.00	13,824,000.00	239.00	13,766,400.00	24.86	4.99	-41.49	-41.99	-8.42
16	Indorama Sintetic	240.00	62.00	61.00	38.00	161.00	241.00	57,840.00	9,009.00	48,831.00	203.46	520,181.00	13,824,000.00	239.00	13,766,400.00	24.61	4.96	-42.46	-42.96	-8.66
17	Indocement Tunggal	240.00	66.00	63.00	40.00	169.00	241.00	57,840.00	9,925.00	47,915.00	199.65	601,543.00	13,824,000.00	239.00	13,766,400.00	26.88	5.18	-30.65	-31.15	-6.01
18	Indosat	240.00	63.00	60.00	40.00	163.00	241.00	57,840.00	9,169.00	48,671.00	202.80	530,047.00	13,824,000.00	239.00	13,766,400.00	25.15	5.01	-39.80	-40.30	-8.04
19	Lippo Bank	240.00	63.00	63.00	39.00	165.00	241.00	57,840.00	9,459.00	48,381.00	201.59	559,413.00	13,824,000.00	239.00	13,766,400.00	25.73	5.07	-36.59	-37.09	-7.31
20	Medco Energi	240.00	61.00	60.00	40.00	161.00	241.00	57,840.00	8,921.00	48,919.00	203.83	506,981.00	13,824,000.00	239.00	13,766,400.00	24.58	4.96	-42.83	-43.33	-8.74



RUNS TEST / UJI LARIAN  
MEI 1998 - DESEMBER 2002

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N+1) - n1^2}{N}$	$n^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2	Z
1	Astra Agro Lestari	240.00	62.00	61.00	43.00	166.00	241.00	57,840.00	9,414.00	48,426.00	201.78	544,816.00	13,824,000.00	239.00	13,766,400.00	25.99	5.10	-35.78	-36.28	-7.12
2	Aneka Tambang	240.00	54.00	54.00	50.00	158.00	241.00	57,840.00	8,332.00	49,508.00	206.28	439,928.00	13,824,000.00	239.00	13,766,400.00	23.71	4.87	-48.28	-48.78	-10.02
3	Astra Graphia	240.00	46.00	50.00	38.00	134.00	241.00	57,840.00	6,060.00	51,780.00	215.75	277,208.00	13,824,000.00	239.00	13,766,400.00	17.46	4.18	-81.75	-82.25	-19.68
4	Astra Internasional	240.00	57.00	58.00	26.00	141.00	241.00	57,840.00	7,289.00	50,551.00	210.63	397,881.00	13,824,000.00	239.00	13,766,400.00	19.61	4.43	-69.63	-70.13	-15.84
5	Bank Negara Indonesia	240.00	44.00	35.00	52.00	131.00	241.00	57,840.00	5,865.00	51,975.00	216.56	268,667.00	13,824,000.00	239.00	13,766,400.00	16.77	4.09	-85.56	-86.06	-21.02
6	Bhakti Investama	240.00	48.00	45.00	54.00	147.00	241.00	57,840.00	7,245.00	50,595.00	210.81	359,181.00	13,824,000.00	239.00	13,766,400.00	20.73	4.55	-63.81	-64.31	-14.13
7	Berlian Laju Tanker	240.00	49.00	48.00	57.00	154.00	241.00	57,840.00	7,954.00	49,886.00	207.86	413,434.00	13,824,000.00	239.00	13,766,400.00	22.60	4.75	-53.86	-54.36	-11.44
8	Bimantara Citra	240.00	56.00	55.00	40.00	151.00	241.00	57,840.00	7,761.00	50,079.00	208.66	405,991.00	13,824,000.00	239.00	13,766,400.00	21.82	4.67	-57.66	-58.16	-12.45
9	Citra Marga Nusapala	240.00	45.00	47.00	52.00	144.00	241.00	57,840.00	6,938.00	50,902.00	212.09	335,556.00	13,824,000.00	239.00	13,766,400.00	19.94	4.47	-68.09	-68.59	-15.36
10	Dankos Laboratories	240.00	52.00	41.00	62.00	155.00	241.00	57,840.00	8,229.00	49,611.00	206.71	447,857.00	13,824,000.00	239.00	13,766,400.00	22.87	4.78	-51.71	-52.21	-10.92

RUNS TEST / UJI LARIAN

MEI 1998 - DESEMBER 2002

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N+1) - n1^2}{N}$	$n^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2	Z
11	Gudang Garam	240.00	60.00	57.00	21.00	138.00	241.00	57,840.00	7,290.00	50,550.00	210.63	410,454.00	13,824,000.00	239.00	13,766,400.00	19.17	4.38	-72.63	-73.13	-16.70
12	Gajah Tunggal	240.00	40.00	48.00	57.00	145.00	241.00	57,840.00	7,153.00	50,687.00	211.20	359,785.00	13,824,000.00	239.00	13,766,400.00	20.22	4.50	-66.20	-66.70	-14.83
13	Great River	240.00	41.00	38.00	55.00	134.00	241.00	57,840.00	6,150.00	51,690.00	215.38	290,168.00	13,824,000.00	239.00	13,766,400.00	17.47	4.18	-81.38	-81.88	-19.59
14	HM Sampoerna	240.00	67.00	55.00	31.00	153.00	241.00	57,840.00	8,475.00	49,365.00	205.69	496,929.00	13,824,000.00	239.00	13,766,400.00	22.49	4.74	-52.69	-53.19	-11.21



**RUNS TEST / UJI LARIAN**  
**21 Mei 1998 - 19 Oktober 1999**

**Pemerintahan HABIBIE**

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N + 1) - n1^2}{N}$	$n^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2	Z
1	Astra Agro Lestari	74.00	19.00	17.00	11.00	47.00	75.00	5,550.00	771.00	4,779.00	64.58	13,103.00	405,224.00	73.00	399,748.00	6.33	2.52	-17.58	#VALUE!	#VALUE!
2	Aneka Tambang	74.00	18.00	15.00	13.00	46.00	75.00	5,550.00	718.00	4,832.00	65.30	11,404.00	405,224.00	73.00	399,748.00	6.02	2.45	-19.30	#VALUE!	#VALUE!
3	Astra Graphia	74.00	14.00	10.00	10.00	34.00	75.00	5,550.00	396.00	5,154.00	69.65	4,744.00	405,224.00	73.00	399,748.00	3.12	1.77	-35.65	#VALUE!	#VALUE!
4	Astra Internasional	74.00	16.00	16.00	11.00	43.00	75.00	5,550.00	633.00	4,917.00	66.45	9,523.00	405,224.00	73.00	399,748.00	5.25	2.29	-23.45	#VALUE!	#VALUE!
5	Bank Negara Indonesia	74.00	15.00	12.00	19.00	46.00	75.00	5,550.00	730.00	4,820.00	65.14	11,962.00	405,224.00	73.00	399,748.00	6.03	2.45	-19.14	#VALUE!	#VALUE!
6	Bhakti Investama	74.00	16.00	11.00	20.00	47.00	75.00	5,550.00	777.00	4,773.00	64.50	13,427.00	405,224.00	73.00	399,748.00	6.31	2.51	-17.50	#VALUE!	#VALUE!
7	Berlian Laju Tanker	74.00	16.00	19.00	20.00	55.00	75.00	5,550.00	1,017.00	4,533.00	61.26	18,955.00	405,224.00	73.00	399,748.00	8.68	2.95	-6.26	#VALUE!	#VALUE!
8	Bimantara Citra	74.00	17.00	19.00	16.00	52.00	75.00	5,550.00	906.00	4,644.00	62.76	15,868.00	405,224.00	73.00	399,748.00	7.74	2.78	-10.76	#VALUE!	#VALUE!
9	Citra Marga Nusapala	74.00	13.00	10.00	18.00	41.00	75.00	5,550.00	593.00	4,957.00	66.99	9,029.00	405,224.00	73.00	399,748.00	4.76	2.18	-25.99	#VALUE!	#VALUE!
10	Dankos Laboratories	74.00	16.00	13.00	16.00	45.00	75.00	5,550.00	681.00	4,869.00	65.80	10,389.00	405,224.00	73.00	399,748.00	5.75	2.40	-20.80	#VALUE!	#VALUE!



RUNS TEST / UJI LARIAN

21 Mei 1998 - 19 Oktober 1999

Pemerintahan HABIBIE

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N + 1) - n1^2}{N}$	$n^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2	Z
11	Gudang Garam	74.00	17.00	18.00	5.00	40.00	75.00	5,550.00	638.00	4,912.00	66.38	10,870.00	405,224.00	73.00	399,748.00	4.84	2.20	-26.38	#VALUE!	#VALUE!
12	Gajah Tunggal	74.00	13.00	13.00	17.00	43.00	75.00	5,550.00	627.00	4,923.00	66.53	9,307.00	405,224.00	73.00	399,748.00	5.23	2.29	-23.53	#VALUE!	#VALUE!
13	Great River	74.00	10.00	12.00	17.00	39.00	75.00	5,550.00	533.00	5,017.00	67.80	7,641.00	405,224.00	73.00	399,748.00	4.27	2.07	-28.80	#VALUE!	#VALUE!
14	HM Sampoerna	74.00	21.00	19.00	7.00	47.00	75.00	5,550.00	851.00	4,699.00	63.50	16,463.00	405,224.00	73.00	399,748.00	6.52	2.55	-16.50	#VALUE!	#VALUE!
15	Indofood Sukses Makmur	74.00	16.00	16.00	7.00	39.00	75.00	5,550.00	561.00	4,989.00	67.42	8,535.00	405,224.00	73.00	399,748.00	4.40	2.10	-28.42	#VALUE!	#VALUE!
16	Indorama Sintetic	74.00	18.00	17.00	12.00	47.00	75.00	5,550.00	757.00	4,793.00	64.77	12,473.00	405,224.00	73.00	399,748.00	6.31	2.51	-17.77	#VALUE!	#VALUE!
17	Indocement Tunggal	74.00	16.00	19.00	13.00	48.00	75.00	5,550.00	786.00	4,764.00	64.38	13,152.00	405,224.00	73.00	399,748.00	6.58	2.56	-16.38	#VALUE!	#VALUE!
18	Indosat	74.00	21.00	20.00	6.00	47.00	75.00	5,550.00	877.00	4,673.00	63.15	17,477.00	405,224.00	73.00	399,748.00	6.62	2.57	-16.15	#VALUE!	#VALUE!
19	Lippo Bank	74.00	13.00	14.00	14.00	41.00	75.00	5,550.00	561.00	4,989.00	67.42	7,685.00	405,224.00	73.00	399,748.00	4.72	2.17	-26.42	#VALUE!	#VALUE!
20	Medco Energi	74.00	20.00	19.00	6.00	45.00	75.00	5,550.00	797.00	4,753.00	64.23	15,075.00	405,224.00	73.00	399,748.00	6.06	2.46	-19.23	#VALUE!	#VALUE!



RUNS TEST / UJI LARIAN

Jan 1998 - Mei 1998

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n^2 = n(+)^2 + n(-)^2 + n(0)^2$	$ER = \frac{N(N+1) - n^2}{N}$	$\frac{N(N+1) - n^2}{N}$	$\frac{n^3 = n(+)^3 + n(-)^3 + n(0)^3}{N}$	$N^3$	$S(R)^2$	S (R)	R - E (R)	- E (R) +/- 1	Z
1	Astra Agro Lestari	19.00	5.00	5.00	1.00	11.00	12.00	132.00	51.00	81.00	4.26	20.00	6,859.00	380.00	280,685.00	529.80	6.74	0.5
2	Astra Tambang	19.00	5.00	5.00	5.00	15.00	16.00	240.00	75.00	165.00	8.68	20.00	6,859.00	380.00	291,917.00	540.29	6.32	0.5
3	Astra Graphia	19.00	4.00	3.00	3.00	10.00	11.00	110.00	34.00	76.00	4.00	20.00	6,859.00	380.00	273,426.00	522.90	6.00	0.5
4	Astra Internasional	19.00	6.00	5.00	3.00	14.00	15.00	210.00	70.00	140.00	7.37	20.00	6,859.00	380.00	289,482.00	538.04	6.63	0.5
5	Bank Negara Indonesia	19.00	2.00	3.00	4.00	9.00	10.00	90.00	29.00	61.00	3.21	20.00	6,859.00	380.00	271,401.00	520.96	5.79	0.5
6	Bhakti Investama	19.00	7.00	5.00	5.00	17.00	18.00	306.00	99.00	207.00	10.89	20.00	6,859.00	380.00	304,301.00	551.63	6.11	0.5
7	Berlian Laju Tanker	19.00	7.00	5.00	3.00	15.00	16.00	240.00	83.00	157.00	8.26	20.00	6,859.00	380.00	295,917.00	543.98	6.74	0.5
8	Bimantara Citra	19.00	4.00	6.00	4.00	14.00	15.00	210.00	68.00	142.00	7.47	20.00	6,859.00	380.00	288,522.00	537.14	6.53	0.5
9	Citra Marga Nusapala	19.00	4.00	4.00	5.00	13.00	14.00	182.00	57.00	125.00	6.58	20.00	6,859.00	380.00	283,385.00	532.34	6.42	0.5
10	Dankos Laboratories	19.00	4.00	5.00	4.00	13.00	14.00	182.00	57.00	125.00	6.58	20.00	6,859.00	380.00	283,385.00	532.34	6.42	0.5
11	Gudang Garam	19.00	6.00	6.00	2.00	14.00	15.00	210.00	76.00	134.00	7.05	20.00	6,859.00	380.00	292,410.00	540.75	6.95	0.5
12	Gajah Tunggal	19.00	4.00	2.00	5.00	11.00	12.00	132.00	45.00	87.00	4.58	20.00	6,859.00	380.00	278,057.00	527.31	6.42	0.5
13	Great River	19.00	3.00	3.00	7.00	13.00	14.00	182.00	67.00	115.00	6.05	20.00	6,859.00	380.00	288,045.00	536.70	6.95	0.5
14	HM Sampoerna	19.00	8.00	7.00	1.00	16.00	17.00	272.00	114.00	158.00	8.32	20.00	6,859.00	380.00	312,626.00	559.13	7.68	0.5
15	Indofood Sukses Makmur	19.00	6.00	6.00	2.00	14.00	15.00	210.00	76.00	134.00	7.05	20.00	6,859.00	380.00	292,410.00	540.75	6.95	0.5
16	Indorama Sintetic	19.00	5.00	5.00	5.00	15.00	16.00	240.00	75.00	165.00	8.68	20.00	6,859.00	380.00	291,917.00	540.29	6.32	0.5
17	Indocement Tunggal	19.00	1.00	3.00	3.00	7.00	8.00	56.00	19.00	37.00	1.95	20.00	6,859.00	380.00	267,501.00	517.20	5.05	0.5
18	Indosat	19.00	4.00	6.00	3.00	13.00	14.00	182.00	61.00	121.00	6.37	20.00	6,859.00	380.00	285,225.00	534.06	6.63	0.5
19	Lippo Bank	19.00	4.00	3.00	4.00	11.00	12.00	132.00	41.00	91.00	4.79	20.00	6,859.00	380.00	276,345.00	525.69	6.21	0.5
20	Medco Energi	19.00	6.00	6.00	3.00	15.00	16.00	240.00	81.00	159.00	8.37	20.00	6,859.00	380.00	294,905.00	543.05	6.63	0.5
21	Multipolar	19.00	1.00	2.00	3.00	6.00	7.00	42.00	14.00	28.00	1.47	20.00	6,859.00	380.00	265,626.00	515.39	4.53	0.5
22	Matahari Putra Prima	19.00	2.00	4.00	3.00	9.00	10.00	90.00	29.00	61.00	3.21	20.00	6,859.00	380.00	271,401.00	520.96	5.79	0.5
23	Metrodata Electronics	19.00	1.00	2.00	4.00	7.00	8.00	56.00	21.00	35.00	1.84	20.00	6,859.00	380.00	268,265.00	517.94	5.16	0.5
24	Ramayana Lestari	19.00	3.00	5.00	2.00	10.00	11.00	110.00	38.00	72.00	3.79	20.00	6,859.00	380.00	275,082.00	524.48	6.21	0.5
25	Duta Pertiwi	19.00	3.00	3.00	4.00	10.00	11.00	110.00	34.00	76.00	4.00	20.00	6,859.00	380.00	273,426.00	522.90	6.00	0.5
26	Semen Cibinong	19.00	2.00	4.00	5.00	11.00	12.00	132.00	45.00	87.00	4.58	20.00	6,859.00	380.00	278,057.00	527.31	6.42	0.5
27	Semen Gresik	19.00	3.00	2.00	2.00	7.00	8.00	56.00	17.00	39.00	2.05	20.00	6,859.00	380.00	266,745.00	516.47	4.95	0.5
28	Telekomunikasi Ind.	19.00	4.00	5.00	1.00	10.00	11.00	110.00	42.00	68.00	3.58	20.00	6,859.00	380.00	276,770.00	526.09	6.42	0.5
29	Tunas Ridean	19.00	5.00	5.00	5.00	15.00	16.00	240.00	75.00	165.00	8.68	20.00	6,859.00	380.00	291,917.00	540.29	6.32	0.5
30	United Tractors	19.00	4.00	5.00	4.00	13.00	14.00	182.00	57.00	125.00	6.58	20.00	6,859.00	380.00	283,385.00	532.34	6.42	0.5

RUNS TEST / UJI LARIAN

20 Oktober 1999 - 22 Juli 2001

Pemerintahan GUSDUR

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N + 1) - n1^2}{N}$	$ni^3 = \frac{n(+)^3 + n(-)^3 + n(0)^3}{N}$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2	Z
1	Astra Agro Lestari	91.00	23.00	29.00	17.00	69.00	92.00	8.372.00	1.659.00	6.713.00	73.77	41,469.00	753,571.00	90.00	745,290.00	11.19	3.35	-4.77	-5.27	-1.58
2	Astra Tambang	91.00	18.00	23.00	18.00	59.00	92.00	8.372.00	1.177.00	7.195.00	79.07	23,831.00	753,571.00	90.00	745,290.00	8.25	2.87	-20.07	-20.57	-7.16
3	Astra Graphia	91.00	21.00	20.00	11.00	52.00	92.00	8.372.00	962.00	7.410.00	81.43	18,592.00	753,571.00	90.00	745,290.00	6.50	2.55	-29.43	-29.93	-11.74
4	Astra Internasional	91.00	25.00	26.00	8.00	59.00	92.00	8.372.00	1.365.00	7.007.00	77.00	33,713.00	753,571.00	90.00	745,290.00	8.59	2.93	-18.00	-18.50	-6.31
5	Bank Negara Indonesia	91.00	18.00	11.00	20.00	49.00	92.00	8.372.00	845.00	7.527.00	82.71	15,163.00	753,571.00	90.00	745,290.00	5.74	2.40	-33.71	-34.21	-14.29
6	Bhakti Investama	91.00	14.00	18.00	18.00	50.00	92.00	8.372.00	844.00	7.528.00	82.73	14,408.00	753,571.00	90.00	745,290.00	5.91	2.43	-32.73	-33.23	-13.67
7	Berlian Laju Tanker	91.00	16.00	16.00	21.00	53.00	92.00	8.372.00	953.00	7.419.00	81.53	17,453.00	753,571.00	90.00	745,290.00	6.65	2.58	-28.53	-29.03	-11.26
8	Bimantara Citra	91.00	19.00	20.00	13.00	52.00	92.00	8.372.00	930.00	7.442.00	81.78	17,056.00	753,571.00	90.00	745,290.00	6.43	2.54	-29.78	-30.28	-11.94
9	Citra Marga Nusapala	91.00	14.00	19.00	19.00	52.00	92.00	8.372.00	918.00	7.454.00	81.91	16,462.00	753,571.00	90.00	745,290.00	6.41	2.53	-29.91	-30.41	-12.01
10	Dankos Laboratories	91.00	18.00	16.00	27.00	61.00	92.00	8.372.00	1.309.00	7.063.00	77.62	29,611.00	753,571.00	90.00	745,290.00	8.76	2.96	-16.62	-17.12	-5.78

RUNS TEST / UJI LARIAN

20 Oktober 1999 - 22 Juli 2001

Pemerintahan GUSDUR

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N + 1) - n1^2}{N}$	$ni^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2	Z
11	Gudang Garam	91.00	24.00	23.00	8.00	55.00	92.00	8.372.00	1,169.00	7,203.00	79.15	26,503.00	753,571.00	90.00	745,290.00	7.48	2.74	-24.15	-24.65	-9.01
12	Gajah Tunggal	91.00	18.00	22.00	22.00	62.00	92.00	8.372.00	1,292.00	7,080.00	77.80	27,128.00	753,571.00	90.00	745,290.00	9.12	3.02	-15.80	-16.30	-5.40
13	Great River	91.00	16.00	19.00	24.00	59.00	92.00	8.372.00	1,193.00	7,179.00	78.89	24,779.00	753,571.00	90.00	745,290.00	8.25	2.87	-19.89	-20.39	-7.10
14	HM Sampoerna	91.00	22.00	23.00	7.00	52.00	92.00	8.372.00	1,062.00	7,310.00	80.33	23,158.00	753,571.00	90.00	745,290.00	6.78	2.60	-28.33	-28.83	-11.07
15	Indofood Sukses Makmur	91.00	23.00	20.00	14.00	57.00	92.00	8.372.00	1,125.00	7,247.00	79.64	22,911.00	753,571.00	90.00	745,290.00	7.73	2.78	-22.64	-23.14	-8.32
16	Indorama Sintetic	91.00	19.00	15.00	24.00	58.00	92.00	8.372.00	1,162.00	7,210.00	79.23	24,058.00	753,571.00	90.00	745,290.00	7.98	2.82	-21.23	-21.73	-7.69
17	Indocement Tunggal	91.00	21.00	21.00	17.00	59.00	92.00	8.372.00	1,171.00	7,201.00	79.13	23,435.00	753,571.00	90.00	745,290.00	8.26	2.87	-20.13	-20.63	-7.18
18	Indosat	91.00	21.00	31.00	9.00	61.00	92.00	8.372.00	1,483.00	6,889.00	75.70	39,781.00	753,571.00	90.00	745,290.00	8.88	2.98	-14.70	-15.20	-5.10
19	Lippo Bank	91.00	6.00	8.00	15.00	29.00	92.00	8.372.00	325.00	8,047.00	88.43	4,103.00	753,571.00	90.00	745,290.00	1.78	1.33	-59.43	-59.93	-44.93
20	Medco Energi	91.00	22.00	24.00	17.00	63.00	92.00	8.372.00	1,349.00	7,023.00	77.18	29,385.00	753,571.00	90.00	745,290.00	9.41	3.07	-14.18	-14.68	-4.78

RUNS TEST / UJI LARIAN

20 Oktober 1999 - 22 Juli 2001

Pemerintahan GUSDUR

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N(N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	$ER = \frac{N(N + 1) - n1^2}{N}$	$ni^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2(N - 1)$	$S(R)^2$	S(R)	R - E(R)	R - E(R) +/- 1/2	Z
21	Multipolar	91.00	19.00	19.00	16.00	54.00	92.00	8.372.00	978.00	7.394.00	81.25	17,814.00	753,571.00	90.00	745,290.00	6.91	2.63	-27.25	-27.75	-10.56
22	Matahari Putra Prima	91.00	19.00	17.00	21.00	57.00	92.00	8.372.00	1,091.00	7,281.00	80.01	21,033.00	753,571.00	90.00	745,290.00	7.71	2.78	-23.01	-23.51	-8.47
23	Metrodata Electronics	91.00	20.00	22.00	14.00	56.00	92.00	8.372.00	1,080.00	7,292.00	80.13	21,392.00	753,571.00	90.00	745,290.00	7.46	2.73	-24.13	-24.63	-9.02
24	Ramayana Lestari	91.00	24.00	23.00	10.00	57.00	92.00	8.372.00	1,205.00	7,167.00	78.76	26,991.00	753,571.00	90.00	745,290.00	7.88	2.81	-21.76	-22.26	-7.93
25	Duta Pertiwi	91.00	19.00	21.00	20.00	60.00	92.00	8.372.00	1,202.00	7,170.00	78.79	24,120.00	753,571.00	90.00	745,290.00	8.54	2.92	-18.79	-19.29	-6.60
26	Semen Cibinong	91.00	21.00	23.00	13.00	57.00	92.00	8.372.00	1,139.00	7,233.00	79.48	23,625.00	753,571.00	90.00	745,290.00	7.75	2.78	-22.48	-22.98	-8.25
27	Semen Gresik	91.00	23.00	23.00	9.00	55.00	92.00	8.372.00	1,139.00	7,233.00	79.48	25,063.00	753,571.00	90.00	745,290.00	7.40	2.72	-24.48	-24.98	-9.18
28	Telekomunikasi Ind.	91.00	21.00	22.00	14.00	57.00	92.00	8.372.00	1,121.00	7,251.00	79.68	22,653.00	753,571.00	90.00	745,290.00	7.74	2.78	-22.68	-23.18	-8.33
29	Tunas Ridean	91.00	20.00	19.00	17.00	56.00	92.00	8.372.00	1,050.00	7,322.00	80.46	19,772.00	753,571.00	90.00	745,290.00	7.43	2.73	-24.46	-24.96	-9.15
30	United Tractors	91.00	23.00	23.00	15.00	61.00	92.00	8.372.00	1,283.00	7,089.00	77.90	27,709.00	753,571.00	90.00	745,290.00	8.84	2.97	-16.90	-17.40	-5.85

**RUNS TEST / UJI LARIAN**  
**23 Juli 2001 - 31 Desember 2002**  
**Pemerintahan MEGAWATI**

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) \cdot n1^2$	ER =		$n1^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2 (N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2
											$\frac{N(N + 1) - n1^2}{N}$									
1	Astra Agro Lestari	75.00	20.00	15.00	15.00	50.00	76.00	5,700.00	850.00	4,850.00	64.67		14,750.00	421,875.00	74.00	416,250.00	7.05	2.65	-14.67	-15.17
2	Astra Tambang	75.00	18.00	16.00	19.00	53.00	76.00	5,700.00	941.00	4,759.00	63.45		16,787.00	421,875.00	74.00	416,250.00	7.95	2.82	-10.45	-10.95
3	Astra Graphia	75.00	11.00	20.00	17.00	48.00	76.00	5,700.00	810.00	4,890.00	65.20		14,244.00	421,875.00	74.00	416,250.00	6.52	2.55	-17.20	-17.70
4	Astra Internasional	75.00	16.00	16.00	7.00	39.00	76.00	5,700.00	561.00	5,139.00	68.52		8,535.00	421,875.00	74.00	416,250.00	4.35	2.09	-29.52	-30.02
5	Bank Negara Indonesia	75.00	11.00	12.00	13.00	36.00	76.00	5,700.00	434.00	5,266.00	70.21		5,256.00	421,875.00	74.00	416,250.00	3.49	1.87	-34.21	-34.71
6	Bhakti Investama	75.00	18.00	16.00	16.00	50.00	76.00	5,700.00	836.00	4,864.00	64.85		14,024.00	421,875.00	74.00	416,250.00	7.06	2.66	-14.85	-15.35
7	Berlian Laju Tanker	75.00	17.00	13.00	16.00	46.00	76.00	5,700.00	714.00	4,986.00	66.48		11,206.00	421,875.00	74.00	416,250.00	5.95	2.44	-20.48	-20.98
8	Bimantara Citra	75.00	20.00	16.00	11.00	47.00	76.00	5,700.00	777.00	4,923.00	65.64		13,427.00	421,875.00	74.00	416,250.00	6.24	2.50	-18.64	-19.14
9	Citra Marga Nusapala	75.00	18.00	18.00	15.00	51.00	76.00	5,700.00	873.00	4,827.00	64.36		15,039.00	421,875.00	74.00	416,250.00	7.35	2.71	-13.36	-13.86
10	Dankos Laboratories	75.00	18.00	12.00	19.00	49.00	76.00	5,700.00	829.00	4,871.00	64.95		14,419.00	421,875.00	74.00	416,250.00	6.79	2.61	-15.95	-16.45

RUNS TEST / UJI LARIAN

23 Juli 2001 - 31 Desember 2002

Pemerintahan MEGAWATI

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	ER =	$n1^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2 (N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2
											$\frac{N(N+1) - n1^2}{N}$								
											N								
11	Gudang Garam	75.00	19.00	16.00	8.00	43.00	76.00	5,700.00	681.00	5,019.00	66.92	11,467.00	421,875.00	74.00	416,250.00	5.29	2.30	-23.92	-24.42
12	Gajah Tunggal	75.00	9.00	13.00	18.00	40.00	76.00	5,700.00	574.00	5,126.00	68.35	8,758.00	421,875.00	74.00	416,250.00	4.48	2.12	-28.35	-28.85
13	Great River	75.00	15.00	7.00	14.00	36.00	76.00	5,700.00	470.00	5,230.00	69.73	6,462.00	421,875.00	74.00	416,250.00	3.62	1.90	-33.73	-34.23
14	HM Sampoerna	75.00	24.00	13.00	17.00	54.00	76.00	5,700.00	1,034.00	4,666.00	62.21	20,934.00	421,875.00	74.00	416,250.00	8.17	2.86	-8.21	-8.71
15	Indofood Sukses Makmur	75.00	20.00	13.00	12.00	45.00	76.00	5,700.00	713.00	4,987.00	66.49	11,925.00	421,875.00	74.00	416,250.00	5.67	2.38	-21.49	-21.99
16	Indorama Sintetic	75.00	9.00	10.00	12.00	31.00	76.00	5,700.00	325.00	5,375.00	71.67	3,457.00	421,875.00	74.00	416,250.00	2.44	1.56	-40.67	-41.17
17	Indocement Tunggal	75.00	5.00	16.00	18.00	39.00	76.00	5,700.00	605.00	5,095.00	67.93	10,053.00	421,875.00	74.00	416,250.00	4.53	2.13	-28.93	-29.43
18	Indosat	75.00	11.00	4.00	5.00	20.00	76.00	5,700.00	162.00	5,538.00	73.84	1,520.00	421,875.00	74.00	416,250.00	0.72	0.85	-53.84	-54.34
19	Lippo Bank	75.00	11.00	6.00	13.00	30.00	76.00	5,700.00	326.00	5,374.00	71.65	3,744.00	421,875.00	74.00	416,250.00	2.36	1.54	-41.65	-42.15
20	Medco Energi	75.00	16.00	12.00	16.00	44.00	76.00	5,700.00	656.00	5,044.00	67.25	9,920.00	421,875.00	74.00	416,250.00	5.43	2.33	-23.25	-23.75





**RUNS TEST / UJI LARIAN**  
**23 Juli 2001 - 31 Desember 2002**  
**Pemerintahan MEGAWATI**

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	ER =		$n^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2 (N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2
											$\frac{N(N + 1) - n1^2}{N}$									
1	Astra Agro Lestari	75.00	20.00	15.00	15.00	50.00	76.00	5,700.00	850.00	4,850.00	64.67		14,750.00	421,875.00	74.00	416,250.00	7.05	2.65	-14.67	-15.17
2	Astra Tambang	75.00	18.00	16.00	19.00	53.00	76.00	5,700.00	941.00	4,759.00	63.45		16,787.00	421,875.00	74.00	416,250.00	7.95	2.82	-10.45	-10.95
3	Astra Graphia	75.00	11.00	20.00	17.00	48.00	76.00	5,700.00	810.00	4,890.00	65.20		14,244.00	421,875.00	74.00	416,250.00	6.52	2.55	-17.20	-17.70
4	Astra Internasional	75.00	16.00	16.00	7.00	39.00	76.00	5,700.00	561.00	5,139.00	68.52		8,535.00	421,875.00	74.00	416,250.00	4.35	2.09	-29.52	-30.02
5	Bank Negara Indonesia	75.00	11.00	12.00	13.00	36.00	76.00	5,700.00	434.00	5,266.00	70.21		5,256.00	421,875.00	74.00	416,250.00	3.49	1.87	-34.21	-34.71
6	Bhakti Investama	75.00	18.00	16.00	16.00	50.00	76.00	5,700.00	836.00	4,864.00	64.85		14,024.00	421,875.00	74.00	416,250.00	7.06	2.66	-14.85	-15.35
7	Berlian Laju Tanker	75.00	17.00	13.00	16.00	46.00	76.00	5,700.00	714.00	4,986.00	66.48		11,206.00	421,875.00	74.00	416,250.00	5.95	2.44	-20.48	-20.98
8	Bimantara Citra	75.00	20.00	16.00	11.00	47.00	76.00	5,700.00	777.00	4,923.00	65.64		13,427.00	421,875.00	74.00	416,250.00	6.24	2.50	-18.64	-19.14
9	Citra Marga Nusapala	75.00	18.00	18.00	15.00	51.00	76.00	5,700.00	873.00	4,827.00	64.36		15,039.00	421,875.00	74.00	416,250.00	7.35	2.71	-13.36	-13.86
10	Dankos Laboratories	75.00	18.00	12.00	19.00	49.00	76.00	5,700.00	829.00	4,871.00	64.95		14,419.00	421,875.00	74.00	416,250.00	6.79	2.61	-15.95	-16.45

RUNS TEST / UJI LARIAN

23 Juli 2001 - 31 Desember 2002

Pemerintahan MEGAWATI

NO.	NAMA	N	n (+)	n (-)	n (0)	R	N + 1	N (N + 1)	$n1^2 = n(+)^2 + n(-)^2 + n(0)^2$	$N(N + 1) - n1^2$	ER =	$n1^3 = n(+)^3 + n(-)^3 + n(0)^3$	$N^3$	N - 1	$N^2 (N - 1)$	$S(R)^2$	S (R)	R - E (R)	R - E (R) +/- 1/2
											$\frac{N(N+1) - n1^2}{N}$								
											N								
11	Gudang Garam	75.00	19.00	16.00	8.00	43.00	76.00	5,700.00	681.00	5,019.00	66.92	11,467.00	421,875.00	74.00	416,250.00	5.29	2.30	-23.92	-24.42
12	Gajah Tunggal	75.00	9.00	13.00	18.00	40.00	76.00	5,700.00	574.00	5,126.00	68.35	8,758.00	421,875.00	74.00	416,250.00	4.48	2.12	-28.35	-28.85
13	Great River	75.00	15.00	7.00	14.00	36.00	76.00	5,700.00	470.00	5,230.00	69.73	6,462.00	421,875.00	74.00	416,250.00	3.62	1.90	-33.73	-34.23
14	HM Sampoerna	75.00	24.00	13.00	17.00	54.00	76.00	5,700.00	1,034.00	4,666.00	62.21	20,934.00	421,875.00	74.00	416,250.00	8.17	2.86	-8.21	-8.71
15	Indofood Sukses Makmur	75.00	20.00	13.00	12.00	45.00	76.00	5,700.00	713.00	4,987.00	66.49	11,925.00	421,875.00	74.00	416,250.00	5.67	2.38	-21.49	-21.99
16	Indorama Sintetic	75.00	9.00	10.00	12.00	31.00	76.00	5,700.00	325.00	5,375.00	71.67	3,457.00	421,875.00	74.00	416,250.00	2.44	1.56	-40.67	-41.17
17	Indocement Tunggal	75.00	5.00	16.00	18.00	39.00	76.00	5,700.00	605.00	5,095.00	67.93	10,053.00	421,875.00	74.00	416,250.00	4.53	2.13	-28.93	-29.43
18	Indosat	75.00	11.00	4.00	5.00	20.00	76.00	5,700.00	162.00	5,538.00	73.84	1,520.00	421,875.00	74.00	416,250.00	0.72	0.85	-53.84	-54.34
19	Lippo Bank	75.00	11.00	6.00	13.00	30.00	76.00	5,700.00	326.00	5,374.00	71.65	3,744.00	421,875.00	74.00	416,250.00	2.36	1.54	-41.65	-42.15
20	Medco Energi	75.00	16.00	12.00	16.00	44.00	76.00	5,700.00	656.00	5,044.00	67.25	9,920.00	421,875.00	74.00	416,250.00	5.43	2.33	-23.25	-23.75

