

LAMPIRAN

Lampiran 1

No.	Tanggal	IndeksMing	Coal	Oil	Gold	Nikel
1	4-Jan-16	794.5600	38.050	36.760	1,075.100	571.100
2	5-Jan-16	799.0700	38.050	35.970	1,078.400	569.600
3	6-Jan-16	807.7600	38.550	33.970	1,091.900	577.400
4	7-Jan-16	797.3500	39.050	33.270	1,107.700	562.900
5	8-Jan-16	799.3200	39.050	33.160	1,097.800	569.800
6	11-Jan-16	794.6900	39.050	31.410	1,096.500	552.200
7	12-Jan-16	791.7700	38.550	30.440	1,085.600	545.700
8	13-Jan-16	791.2200	38.750	30.480	1,087.500	554.600
9	14-Jan-16	788.7700	38.450	31.200	1,073.900	579.400
10	15-Jan-16	785.3400	37.950	29.420	1,091.500	572.100
11	18-Jan-16	775.8300	37.950	30.020	1,088.500	578.900
12	19-Jan-16	771.5300	37.300	28.460	1,089.900	581.400
13	20-Jan-16	769.8700	37.300	26.550	1,107.100	581.500
14	21-Jan-16	766.8600	37.150	29.530	1,099.100	592.200
15	22-Jan-16	786.1500	37.800	32.190	1,097.200	582.900
16	25-Jan-16	788.0800	37.800	30.340	1,106.200	577.800
17	26-Jan-16	771.7600	37.800	31.450	1,121.700	583.373
18	27-Jan-16	774.7700	37.800	32.300	1,116.100	588.300
19	28-Jan-16	781.0100	37.800	33.220	1,115.600	582.800
20	29-Jan-16	785.2900	37.800	33.620	1,116.400	579.300
21	1-Feb-16	775.2800	37.800	31.620	1,127.900	580.600
22	2-Feb-16	781.5700	37.550	29.880	1,127.300	572.700
23	3-Feb-16	784.6700	37.550	32.280	1,141.300	581.800
24	4-Feb-16	796.4400	37.050	31.720	1,157.600	580.000
25	5-Feb-16	799.1700	37.050	30.890	1,157.800	555.500
26	9-Feb-16	787.4600	37.050	27.940	1,198.700	551.900
27	10-Feb-16	782.5200	37.050	27.450	1,194.700	542.100
28	11-Feb-16	791.3800	37.050	26.210	1,247.900	522.600
29	12-Feb-16	790.1800	37.050	29.440	1,239.100	534.100
30	15-Feb-16	791.6600	37.050	30.600	1,208.100	564.400
31	16-Feb-16	796.7300	37.300	29.040	1,207.900	572.100
32	17-Feb-16	799.1400	37.300	30.660	1,211.100	576.400

33	18-Feb-16	808.6000	37.300	30.770	1,226.100	572.600
34	19-Feb-16	804.2100	37.300	29.640	1,230.400	592.200
35	22-Feb-16	824.6900	37.300	31.480	1,209.500	599.100
36	23-Feb-16	817.8600	37.300	31.870	1,222.300	592.400
37	24-Feb-16	809.2500	37.300	32.150	1,238.700	592.000
38	25-Feb-16	807.3000	37.300	33.070	1,238.200	572.900
39	26-Feb-16	831.8500	37.050	32.780	1,219.800	582.700
40	29-Feb-16	834.9900	37.300	33.750	1,233.900	579.500
41	1-Mar-16	849.3600	37.300	34.400	1,230.300	591.600
42	2-Mar-16	853.9500	37.300	34.660	1,241.100	589.900
43	3-Mar-16	856.9100	37.300	34.570	1,257.400	606.100
44	4-Mar-16	871.9900	37.550	35.920	1,269.900	626.700
45	7-Mar-16	907.9900	38.050	37.900	1,263.200	627.500
46	8-Mar-16	920.1900	37.950	36.500	1,262.100	581.700
47	10-Mar-16	904.3900	37.950	37.840	1,272.000	593.100
48	11-Mar-16	900.6900	38.050	38.500	1,258.700	588.700
49	14-Mar-16	910.2400	38.800	37.180	1,244.400	582.500
50	15-Mar-16	894.7100	38.950	36.340	1,230.400	580.600
51	16-Mar-16	903.8600	38.400	38.460	1,229.300	578.300
52	17-Mar-16	928.2300	38.050	40.200	1,264.500	590.000
53	18-Mar-16	906.3700	38.050	39.440	1,253.800	574.100
54	21-Mar-16	907.9200	38.050	39.910	1,243.800	584.100
55	22-Mar-16	915.3200	38.050	41.450	1,248.200	586.900
56	23-Mar-16	907.8800	37.800	39.790	1,223.700	577.900
57	24-Mar-16	891.4000	37.700	39.460	1,221.400	581.000
58	28-Mar-16	893.4300	37.750	39.390	1,219.900	576.600
59	29-Mar-16	893.7300	37.650	38.280	1,235.600	564.400
60	30-Mar-16	898.4400	37.500	38.320	1,226.900	557.700
61	31-Mar-16	895.7700	37.500	38.340	1,234.200	550.600
62	1-Apr-16	897.5200	37.400	36.790	1,222.200	555.900
63	4-Apr-16	912.2600	37.050	35.700	1,218.000	559.200
64	5-Apr-16	910.2700	36.550	35.890	1,228.400	568.300
65	6-Apr-16	929.9700	36.550	37.750	1,222.500	573.100
66	7-Apr-16	949.5900	35.050	37.260	1,236.200	562.100
67	8-Apr-16	952.4800	35.050	39.720	1,242.500	572.800
68	11-Apr-16	953.3400	34.800	40.360	1,256.700	567.600
69	12-Apr-16	953.2800	34.800	42.170	1,259.400	589.400
70	13-Apr-16	987.3500	34.050	41.760	1,246.800	596.300
71	14-Apr-16	962.0600	33.550	41.500	1,225.000	599.900

72	15-Apr-16	957.2000	33.550	40.360	1,233.100	593.700
73	18-Apr-16	958.3100	33.550	39.780	1,233.600	606.400
74	19-Apr-16	967.8900	33.550	41.080	1,253.000	610.100
75	20-Apr-16	970.9500	33.550	42.630	1,253.200	613.200
76	21-Apr-16	989.9000	33.550	43.180	1,249.000	602.100
77	22-Apr-16	979.7500	33.550	43.730	1,228.700	601.600
78	25-Apr-16	980.3200	33.550	42.640	1,238.900	606.300
79	26-Apr-16	977.3800	34.400	44.040	1,242.200	609.400
80	27-Apr-16	987.0400	34.400	45.330	1,249.200	610.700
81	28-Apr-16	996.0500	34.400	46.030	1,265.500	613.800
82	29-Apr-16	995.6100	34.400	45.920	1,289.200	628.600
83	2-May-16	981.8200	34.300	44.780	1,294.700	629.100
84	3-May-16	978.2300	34.300	43.650	1,290.700	633.700
85	4-May-16	972.8200	34.300	43.780	1,273.300	630.700
86	9-May-16	957.1500	34.300	43.440	1,265.600	579.100
87	10-May-16	939.9200	34.300	44.660	1,263.900	582.500
88	11-May-16	949.6900	34.050	46.230	1,274.600	590.400
89	12-May-16	953.8500	34.050	46.700	1,270.300	577.900
90	13-May-16	942.9300	33.950	46.210	1,271.900	580.900
91	16-May-16	944.1500	33.900	47.720	1,273.400	584.800
92	17-May-16	948.7300	33.900	48.310	1,276.200	587.400
93	18-May-16	947.5300	33.550	48.190	1,273.700	581.000
94	19-May-16	937.0600	33.550	48.160	1,254.200	578.800
95	20-May-16	935.3100	33.550	47.750	1,252.400	572.100
96	23-May-16	939.1000	33.550	48.080	1,251.100	564.300
97	24-May-16	932.4200	33.300	48.620	1,228.900	570.100
98	25-May-16	949.1300	33.300	49.560	1,223.500	562.000
99	26-May-16	968.6200	33.450	49.480	1,220.100	558.700
100	27-May-16	965.8900	33.350	49.330	1,213.800	562.100
101	30-May-16	967.2700	33.350	49.510	1,212.150	559.000
102	31-May-16	960.9300	33.350	49.100	1,214.800	568.700
103	1-Jun-16	961.8100	34.050	49.010	1,211.900	574.100
104	2-Jun-16	976.8800	33.900	49.170	1,209.800	570.000
105	3-Jun-16	996.3000	33.850	48.620	1,240.100	572.100
106	6-Jun-16	1011.3500	34.150	49.690	1,244.600	581.000
107	7-Jun-16	1036.5300	35.100	50.360	1,244.400	576.700
108	8-Jun-16	1024.6801	35.650	51.230	1,259.800	598.900
109	9-Jun-16	1050.2600	37.050	50.560	1,270.200	598.300
110	10-Jun-16	1042.0300	37.650	49.070	1,273.400	597.600

111	13-Jun-16	1025.6200	37.650	48.880	1,284.400	596.300
112	14-Jun-16	1017.5000	38.050	48.490	1,285.600	597.400
113	15-Jun-16	1035.5900	38.050	48.010	1,285.800	603.600
114	16-Jun-16	1036.0900	37.900	46.210	1,296.100	597.200
115	17-Jun-16	1029.6200	37.550	47.980	1,292.500	606.500
116	20-Jun-16	1055.6200	37.550	49.370	1,290.000	623.700
117	21-Jun-16	1056.3800	37.550	48.850	1,270.500	620.300
118	22-Jun-16	1051.8000	37.550	49.130	1,268.000	619.000
119	23-Jun-16	1048.4200	37.050	50.110	1,261.200	618.500
120	24-Jun-16	1038.5200	36.800	47.640	1,320.000	608.300
121	27-Jun-16	1042.8700	37.450	46.330	1,322.500	606.600
122	28-Jun-16	1041.6300	37.450	47.850	1,315.300	630.100
123	29-Jun-16	1050.8199	37.600	49.880	1,323.900	633.300
124	30-Jun-16	1052.9301	39.000	48.330	1,318.400	636.700
125	1-Jul-16	1066.1801	39.000	48.990	1,336.700	671.100
126	11-Jul-16	1090.3800	39.350	44.760	1,355.000	674.800
127	12-Jul-16	1121.8101	39.500	46.800	1,334.100	701.400
128	13-Jul-16	1160.8000	39.600	44.750	1,342.400	688.900
129	14-Jul-16	1149.2300	40.050	45.680	1,331.300	691.700
130	15-Jul-16	1150.7800	40.200	45.950	1,326.500	686.500
131	18-Jul-16	1174.3199	40.600	45.240	1,328.400	709.700
132	19-Jul-16	1175.8500	40.600	44.650	1,331.500	702.500
133	20-Jul-16	1183.5699	40.550	44.940	1,318.800	708.400
134	21-Jul-16	1176.9399	40.550	44.750	1,330.500	718.000
135	22-Jul-16	1180.2400	41.550	44.190	1,323.100	696.400
136	25-Jul-16	1186.4399	41.550	43.130	1,319.300	705.900
137	26-Jul-16	1173.1300	42.800	42.920	1,320.700	694.700
138	27-Jul-16	1176.8900	42.800	41.920	1,326.600	694.000
139	28-Jul-16	1188.8500	43.550	41.140	1,332.300	715.300
140	29-Jul-16	1182.4301	43.550	41.600	1,349.000	701.400
141	1-Aug-16	1195.4399	43.900	40.060	1,351.400	718.100
142	2-Aug-16	1209.8300	44.600	39.510	1,364.400	716.400
143	3-Aug-16	1214.6801	44.600	40.830	1,356.100	720.400
144	4-Aug-16	1217.2400	44.550	41.930	1,358.800	708.300
145	5-Aug-16	1215.4301	45.150	41.800	1,336.400	716.300
146	8-Aug-16	1213.3900	45.850	43.020	1,333.400	721.200
147	9-Aug-16	1230.9000	46.150	42.770	1,339.000	721.200
148	10-Aug-16	1217.6200	46.150	41.710	1,344.300	722.600
149	11-Aug-16	1198.6600	46.300	43.490	1,342.500	716.000

150	12-Aug-16	1200.4301	46.300	44.490	1,335.800	688.700
151	15-Aug-16	1179.4900	46.250	45.740	1,340.300	675.200
152	16-Aug-16	1187.8900	46.200	46.580	1,350.500	685.100
153	18-Aug-16	1213.8800	45.400	48.220	1,351.200	689.600
154	19-Aug-16	1197.7800	45.400	48.520	1,340.400	694.200
155	22-Aug-16	1195.0800	45.800	47.050	1,337.700	688.100
156	23-Aug-16	1178.7300	46.300	48.100	1,340.600	684.100
157	24-Aug-16	1176.7500	46.300	46.770	1,324.400	667.600
158	25-Aug-16	1161.2400	46.300	47.330	1,320.100	656.700
159	26-Aug-16	1152.9900	45.750	47.640	1,321.500	656.800
160	29-Aug-16	1136.5200	46.850	46.980	1,322.900	659.800
161	30-Aug-16	1149.7400	47.950	46.350	1,311.700	655.400
162	31-Aug-16	1163.6400	47.850	44.700	1,306.900	650.700
163	1-Sep-16	1160.2800	47.950	43.160	1,312.200	664.600
164	2-Sep-16	1155.6600	47.950	44.440	1,322.100	669.300
165	5-Sep-16	1186.6200	47.950	45.070	1,331.100	667.200
166	6-Sep-16	1190.1600	47.950	44.830	1,349.400	671.200
167	7-Sep-16	1201.1700	47.700	45.500	1,344.300	679.100
168	8-Sep-16	1199.5699	47.550	47.620	1,336.800	685.500
169	9-Sep-16	1184.6700	47.650	45.880	1,330.100	692.300
170	13-Sep-16	1137.2300	47.950	44.900	1,319.000	662.500
171	14-Sep-16	1119.5500	49.550	43.580	1,321.500	659.000
172	15-Sep-16	1135.0000	51.450	43.910	1,313.500	648.900
173	16-Sep-16	1132.6300	51.550	43.030	1,305.800	651.600
174	19-Sep-16	1126.6600	54.650	43.300	1,317.150	678.700
175	20-Sep-16	1120.6000	57.650	43.440	1,319.250	687.200
176	21-Sep-16	1129.0500	58.050	45.340	1,326.900	690.300
177	22-Sep-16	1143.6899	59.950	46.320	1,340.400	705.100
178	23-Sep-16	1147.3000	57.700	44.480	1,341.550	706.300
179	26-Sep-16	1132.8400	57.050	45.930	1,339.700	694.800
180	27-Sep-16	1163.3199	55.500	44.670	1,325.900	703.100
181	28-Sep-16	1163.8101	57.050	47.050	1,326.950	707.300
182	29-Sep-16	1186.6300	58.050	47.830	1,321.700	693.800
183	30-Sep-16	1158.5900	56.950	48.240	1,313.300	699.100
184	3-Oct-16	1191.1000	56.800	48.810	1,309.000	687.700
185	4-Oct-16	1190.6100	57.050	48.690	1,266.300	671.700
186	5-Oct-16	1171.2100	57.000	49.830	1,265.200	675.800
187	6-Oct-16	1195.5200	57.000	50.440	1,249.800	684.500
188	7-Oct-16	1208.0400	57.050	49.810	1,248.900	680.900

189	10-Oct-16	1215.8500	56.050	51.350	1,257.500	699.900
190	11-Oct-16	1237.5900	55.050	50.790	1,253.000	697.700
191	12-Oct-16	1243.3600	55.050	50.180	1,251.100	706.600
192	13-Oct-16	1238.4800	55.600	50.440	1,255.000	696.400
193	14-Oct-16	1246.8101	56.100	50.350	1,253.100	697.900
194	17-Oct-16	1266.1700	56.550	49.940	1,254.400	688.100
195	18-Oct-16	1258.5699	57.550	50.290	1,260.800	695.400
196	19-Oct-16	1280.4900	57.550	51.600	1,267.900	685.800
197	20-Oct-16	1274.6100	57.550	50.430	1,265.600	675.200
198	21-Oct-16	1256.6500	57.550	50.850	1,267.050	666.600
199	24-Oct-16	1271.9100	57.550	50.520	1,262.000	677.600
200	25-Oct-16	1270.6000	58.050	49.960	1,271.900	682.000
201	26-Oct-16	1298.5900	61.150	49.180	1,264.800	681.200
202	27-Oct-16	1303.7900	60.450	49.720	1,267.900	689.900
203	28-Oct-16	1301.8500	60.800	48.700	1,275.500	692.400
204	31-Oct-16	1316.8400	60.950	46.860	1,271.500	696.600
205	1-Nov-16	1338.5400	63.050	46.670	1,286.400	697.200
206	2-Nov-16	1362.2100	63.050	45.340	1,306.800	690.900
207	3-Nov-16	1328.7000	63.400	44.660	1,302.100	700.100
208	4-Nov-16	1359.7600	63.450	44.070	1,303.300	698.000
209	7-Nov-16	1397.1600	64.250	44.890	1,278.300	747.700
210	8-Nov-16	1390.7500	63.200	44.980	1,273.400	745.100
211	9-Nov-16	1380.6700	62.750	45.270	1,272.600	771.400
212	10-Nov-16	1426.6500	61.450	44.660	1,265.500	766.900
213	11-Nov-16	1440.4900	61.050	43.410	1,223.500	757.700
214	14-Nov-16	1398.6500	61.050	43.320	1,221.200	769.400
215	15-Nov-16	1321.2500	60.300	45.810	1,224.000	769.100
216	16-Nov-16	1363.6500	59.950	45.570	1,223.400	769.900
217	17-Nov-16	1344.2000	59.450	45.420	1,216.500	760.200
218	18-Nov-16	1318.6801	58.450	45.690	1,208.500	740.700
219	21-Nov-16	1334.6400	58.450	47.490	1,215.850	776.000
220	22-Nov-16	1378.0100	57.450	48.030	1,211.000	773.900
221	23-Nov-16	1399.8300	57.450	47.960	1,189.100	798.500
222	24-Nov-16	1391.2200	57.450	47.980	1,185.550	791.800
223	25-Nov-16	1395.9700	57.450	46.060	1,178.200	799.400
224	28-Nov-16	1400.8101	57.000	47.080	1,190.600	787.500
225	29-Nov-16	1402.0300	55.950	45.230	1,187.900	763.900
226	30-Nov-16	1375.6400	52.950	49.440	1,170.800	754.300
227	1-Dec-16	1409.3300	52.800	51.060	1,166.900	764.700

228	2-Dec-16	1422.5100	52.850	51.680	1,175.100	781.500
229	5-Dec-16	1455.1500	54.050	51.790	1,174.000	790.400
230	6-Dec-16	1443.6100	53.050	50.930	1,167.600	786.000
231	7-Dec-16	1433.0500	52.550	49.770	1,175.000	768.800
232	8-Dec-16	1412.7300	53.650	50.840	1,169.800	751.800
233	9-Dec-16	1424.8000	55.550	51.500	1,159.400	772.600
234	13-Dec-16	1421.2500	58.950	52.980	1,156.700	769.400
235	14-Dec-16	1415.1899	58.300	51.040	1,161.300	773.000
236	15-Dec-16	1413.8000	58.400	50.900	1,127.800	763.400
237	16-Dec-16	1406.5601	58.800	51.900	1,135.300	758.300
238	19-Dec-16	1390.1400	58.800	52.120	1,140.500	736.300
239	20-Dec-16	1377.0400	59.650	52.230	1,131.500	742.900
240	21-Dec-16	1370.2400	59.650	52.490	1,131.100	732.800
241	22-Dec-16	1352.5300	61.050	52.950	1,128.800	729.800
242	23-Dec-16	1339.4600	61.050	53.020	1,131.900	706.000
243	27-Dec-16	1347.3400	58.050	53.900	1,137.300	704.800
244	28-Dec-16	1375.7700	58.300	54.060	1,139.400	687.000
245	29-Dec-16	1385.7500	58.300	53.770	1,156.400	685.700
246	30-Dec-16	1384.7100	58.300	53.720	1,150.000	682.000
247	3-Jan-17	1392.7400	58.300	52.330	1,160.400	683.800
248	4-Jan-17	1376.2200	55.050	53.260	1,163.800	697.100
249	5-Jan-17	1378.8700	55.100	53.760	1,179.700	696.100
250	6-Jan-17	1396.1100	55.050	53.990	1,171.900	700.500
251	9-Jan-17	1397.2300	55.050	51.960	1,183.500	706.900
252	10-Jan-17	1388.6300	54.600	50.820	1,184.200	721.000
253	11-Jan-17	1413.0900	54.650	52.250	1,195.600	688.600
254	12-Jan-17	1408.7100	55.350	53.010	1,198.900	701.800
255	13-Jan-17	1391.9800	56.950	52.370	1,195.300	710.000
256	16-Jan-17	1394.9399	56.950	52.520	1,202.850	697.200
257	17-Jan-17	1396.1300	59.650	52.480	1,212.000	688.000
258	18-Jan-17	1403.2400	64.500	51.080	1,211.300	693.100
259	19-Jan-17	1397.3000	61.800	51.370	1,200.900	673.200
260	20-Jan-17	1381.9100	62.550	52.420	1,204.300	658.700
261	23-Jan-17	1384.9399	60.100	52.750	1,215.000	664.600
262	24-Jan-17	1389.5800	60.100	53.180	1,210.300	667.000
263	25-Jan-17	1388.3600	58.050	52.750	1,197.300	659.800
264	26-Jan-17	1393.0300	58.050	53.780	1,189.500	659.000
265	27-Jan-17	1395.4399	57.050	53.170	1,188.100	645.100
266	30-Jan-17	1402.4600	55.550	52.630	1,193.200	656.900

267	31-Jan-17	1410.1700	56.400	52.810	1,208.600	667.800
268	1-Feb-17	1430.5000	56.400	53.880	1,205.600	692.100
269	2-Feb-17	1456.4100	59.050	53.540	1,216.700	696.900
270	3-Feb-17	1438.1600	59.050	53.830	1,218.500	689.600
271	6-Feb-17	1437.6100	58.050	53.010	1,230.000	703.100
272	7-Feb-17	1431.1700	59.300	52.170	1,234.200	696.900
273	8-Feb-17	1423.5300	59.650	52.340	1,237.600	701.900
274	9-Feb-17	1420.3900	60.150	53.000	1,235.100	686.300
275	10-Feb-17	1428.2400	60.150	53.860	1,234.400	710.800
276	13-Feb-17	1424.0400	57.450	52.930	1,224.400	714.500
277	14-Feb-17	1413.2800	57.450	53.200	1,223.900	720.400
278	16-Feb-17	1405.1801	57.250	53.360	1,240.000	739.600
279	17-Feb-17	1411.5900	57.050	53.400	1,237.600	739.700
280	20-Feb-17	1431.2100	57.050	53.970	1,238.200	744.300
281	21-Feb-17	1419.7400	57.050	54.060	1,237.500	721.500
282	22-Feb-17	1420.9301	54.550	53.590	1,232.000	716.500
283	23-Feb-17	1430.6400	53.550	54.450	1,250.200	700.200
284	24-Feb-17	1419.6200	53.550	53.990	1,256.900	723.700
285	27-Feb-17	1421.9800	53.200	54.050	1,257.400	734.100
286	28-Feb-17	1429.6000	52.950	54.010	1,252.600	726.700
287	1-Mar-17	1414.5699	53.300	53.830	1,248.900	737.100
288	2-Mar-17	1430.5400	53.300	52.610	1,231.900	722.400
289	3-Mar-17	1429.7900	53.300	53.330	1,225.500	735.700
290	6-Mar-17	1427.5300	53.400	53.200	1,224.500	738.900
291	7-Mar-17	1425.2300	53.300	53.140	1,215.100	710.900
292	8-Mar-17	1411.3400	53.300	50.280	1,208.500	678.900
293	9-Mar-17	1393.8700	53.250	49.280	1,202.400	678.000
294	10-Mar-17	1363.9000	53.250	48.490	1,200.700	660.500
295	13-Mar-17	1371.3000	52.700	48.400	1,202.400	675.400
296	14-Mar-17	1387.5601	52.050	47.720	1,201.900	672.800
297	15-Mar-17	1397.1000	52.050	48.860	1,203.800	671.500
298	16-Mar-17	1420.9000	52.050	48.750	1,230.200	666.700
299	17-Mar-17	1440.8000	52.050	48.780	1,233.200	671.900
300	20-Mar-17	1432.5900	52.050	48.220	1,237.200	664.000
301	21-Mar-17	1464.1000	52.050	47.340	1,249.600	663.600
302	22-Mar-17	1460.6100	52.150	48.040	1,252.800	658.400
303	23-Mar-17	1482.8000	52.150	47.700	1,250.100	654.100
304	24-Mar-17	1492.4301	52.150	47.970	1,251.700	644.300
305	27-Mar-17	1492.8800	53.000	47.730	1,258.800	637.100

306	29-Mar-17	1516.0400	52.450	48.370	1,256.800	646.200
307	30-Mar-17	1525.0400	51.950	49.510	1,248.000	646.200
308	31-Mar-17	1524.3500	51.400	50.350	1,251.200	643.400
309	3-Apr-17	1526.9301	51.400	50.600	1,254.000	639.400
310	4-Apr-17	1581.6801	51.200	50.240	1,258.400	652.200
311	5-Apr-17	1568.9000	51.200	51.030	1,248.500	672.600
312	6-Apr-17	1548.0800	51.200	51.150	1,253.300	654.100
313	7-Apr-17	1568.2200	51.200	51.700	1,257.300	656.800
314	10-Apr-17	1556.2300	51.200	52.240	1,253.900	652.000
315	11-Apr-17	1559.2800	50.550	53.080	1,274.200	638.100
316	12-Apr-17	1538.5000	50.550	53.400	1,278.100	628.400
317	13-Apr-17	1546.8800	50.550	53.110	1,288.500	626.700
318	17-Apr-17	1547.5300	50.550	53.180	1,291.900	623.900
319	18-Apr-17	1549.0400	50.550	52.650	1,294.100	604.900
320	20-Apr-17	1536.6200	50.550	50.440	1,283.800	612.800
321	21-Apr-17	1527.2600	50.550	50.270	1,289.100	604.800
322	25-Apr-17	1530.2700	50.000	49.620	1,267.200	596.700
323	26-Apr-17	1534.5601	50.500	49.620	1,264.200	591.300
324	27-Apr-17	1546.5699	50.350	48.970	1,265.900	596.200
325	28-Apr-17	1529.1200	49.900	49.330	1,268.300	606.900
326	2-May-17	1499.3300	49.900	47.660	1,257.000	614.000
327	3-May-17	1465.5200	49.900	47.820	1,248.500	595.000
328	4-May-17	1442.7400	49.900	45.520	1,228.600	580.000
329	5-May-17	1417.5100	49.900	46.220	1,226.900	589.700
330	8-May-17	1423.7300	49.900	46.430	1,227.100	589.700
331	9-May-17	1389.2300	49.900	45.880	1,216.100	597.000
332	10-May-17	1347.0300	49.900	47.330	1,218.900	591.000
333	12-May-17	1350.6200	49.900	47.840	1,227.700	599.200
334	15-May-17	1348.4800	49.900	48.850	1,230.000	587.100
335	16-May-17	1364.9600	50.300	48.660	1,236.400	585.600
336	17-May-17	1346.1400	50.600	49.070	1,258.700	585.400
337	18-May-17	1362.0100	50.600	49.350	1,252.800	594.200
338	19-May-17	1378.7500	50.600	50.330	1,253.600	602.500
339	22-May-17	1362.6500	50.800	50.730	1,264.800	605.500
340	23-May-17	1361.8900	53.050	51.470	1,258.900	604.800
341	24-May-17	1356.6000	53.050	51.360	1,256.500	589.800
342	26-May-17	1365.1400	54.700	49.800	1,271.400	584.800
343	29-May-17	1372.3300	55.143	49.970	1,266.690	584.700
344	30-May-17	1370.4399	54.770	49.660	1,265.700	586.800

345	31-May-17	1397.2300	54.800	48.320	1,275.400	569.600
346	2-Jun-17	1380.4900	54.450	47.660	1,280.200	574.100
347	5-Jun-17	1384.2200	54.450	47.400	1,282.700	572.100
348	6-Jun-17	1395.4000	54.450	48.190	1,297.500	575.400
349	7-Jun-17	1406.6700	54.450	45.720	1,293.200	568.800
350	8-Jun-17	1397.1200	54.450	45.640	1,279.500	567.900
351	9-Jun-17	1392.9900	54.550	45.830	1,271.400	576.600
352	12-Jun-17	1383.0800	54.550	46.080	1,268.900	564.000
353	13-Jun-17	1393.4700	54.550	46.460	1,268.600	566.300
354	14-Jun-17	1419.3101	54.550	44.730	1,275.900	569.400
355	15-Jun-17	1417.6200	54.500	44.460	1,254.600	573.400
356	16-Jun-17	1406.1899	54.150	44.740	1,256.500	574.700
357	19-Jun-17	1400.0699	54.450	44.200	1,246.700	580.100
358	20-Jun-17	1420.5800	54.450	43.230	1,243.500	572.200
359	21-Jun-17	1407.0800	54.650	42.530	1,245.800	578.200
360	22-Jun-17	1404.8101	54.850	42.740	1,249.400	582.800
361	3-Jul-17	1422.5500	53.900	47.070	1,219.200	606.900
362	4-Jul-17	1417.4500	54.250	47.130	1,227.550	595.400
363	5-Jul-17	1409.1801	54.300	45.130	1,221.700	593.200
364	6-Jul-17	1413.1899	55.300	45.520	1,223.300	589.400
365	7-Jul-17	1402.4399	55.400	44.230	1,209.700	580.800
366	10-Jul-17	1391.7300	55.650	44.400	1,213.200	581.100
367	11-Jul-17	1395.5100	56.150	45.040	1,214.700	593.000
368	12-Jul-17	1418.2100	56.350	45.490	1,219.100	592.400
369	13-Jul-17	1422.4200	57.000	46.080	1,217.300	591.500
370	14-Jul-17	1430.2200	57.000	46.540	1,227.500	612.600
371	17-Jul-17	1459.9301	56.550	46.020	1,233.700	618.100
372	18-Jul-17	1443.9800	56.550	46.400	1,241.900	624.500
373	19-Jul-17	1469.6000	56.550	47.120	1,242.000	619.000
374	20-Jul-17	1476.8900	56.550	46.790	1,245.500	610.400
375	21-Jul-17	1466.8400	56.550	45.770	1,254.900	613.200
376	24-Jul-17	1462.4100	56.550	46.340	1,254.300	625.900
377	25-Jul-17	1460.1400	56.550	47.890	1,258.500	642.900
378	26-Jul-17	1465.3000	56.050	48.750	1,255.600	639.400
379	27-Jul-17	1476.3199	55.800	49.040	1,266.500	649.500
380	28-Jul-17	1501.0500	55.800	49.710	1,275.300	656.900
381	31-Jul-17	1482.9600	55.400	50.170	1,273.400	655.500
382	1-Aug-17	1507.2300	55.400	49.160	1,279.400	657.900
383	2-Aug-17	1515.6400	54.800	49.590	1,278.400	658.900

384	3-Aug-17	1477.4500	54.800	49.030	1,274.400	660.900
385	4-Aug-17	1500.5400	54.800	49.580	1,264.600	659.000
386	7-Aug-17	1492.8500	56.500	49.390	1,264.700	662.700
387	8-Aug-17	1485.7400	56.200	49.170	1,262.600	684.000
388	9-Aug-17	1484.1700	56.000	49.560	1,279.300	686.700
389	10-Aug-17	1495.1100	56.000	48.590	1,290.100	697.200
390	11-Aug-17	1485.7800	56.000	48.820	1,294.000	681.400
391	14-Aug-17	1491.5500	56.000	47.590	1,290.400	667.400
392	15-Aug-17	1505.0699	56.000	47.550	1,279.700	664.750
393	16-Aug-17	1500.8300	56.000	46.780	1,282.900	686.100
394	18-Aug-17	1511.3600	56.800	48.510	1,291.600	704.000
395	21-Aug-17	1506.7200	56.800	47.370	1,296.700	724.900
396	22-Aug-17	1519.2300	57.050	47.640	1,291.000	731.000
397	23-Aug-17	1548.2000	56.550	48.410	1,294.700	750.500
398	24-Aug-17	1544.4000	56.600	47.430	1,292.000	748.900
399	25-Aug-17	1534.0500	56.600	47.870	1,297.900	729.300
400	28-Aug-17	1522.2900	57.000	46.570	1,315.300	745.400
401	29-Aug-17	1521.7100	57.350	46.440	1,318.900	746.500
402	30-Aug-17	1511.9500	58.050	45.960	1,314.100	738.300
403	31-Aug-17	1505.5300	58.050	47.230	1,322.200	743.400

Lampiran 2

1. UJI STASIONER PADA DATA LEVEL

Null Hypothesis: INDEKSMING has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.343037	0.6105
Test critical values:		
1% level	-3.446402	
5% level	-2.868511	
10% level	-2.570549	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: COAL has a unit root
 Exogenous: Constant
 Lag Length: 2 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.103124	0.7158
Test critical values:		
1% level	-3.446484	
5% level	-2.868547	
10% level	-2.570568	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: GOLDPRICE has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.761696	0.0648
Test critical values:		
1% level	-3.446402	
5% level	-2.868511	
10% level	-2.570549	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: NICKELPRICE has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.762336	0.3991
Test critical values:		
1% level	-3.446402	
5% level	-2.868511	
10% level	-2.570549	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: WTIPRICE has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.009779	0.2827
Test critical values:		
1% level	-3.446402	
5% level	-2.868511	
10% level	-2.570549	

*MacKinnon (1996) one-sided p-values.

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2. UJI STASIONER PADA DATA FIRST DIFFERENT

Null Hypothesis: D(INDEKSMING) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-19.69927	0.0000
Test critical values: 1% level	-3.446443	
5% level	-2.868529	
10% level	-2.570558	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(COAL) has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-11.54721	0.0000
Test critical values: 1% level	-3.446484	
5% level	-2.868547	
10% level	-2.570568	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GOLDPRICE) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-19.55983	0.0000
Test critical values: 1% level	-3.446443	
5% level	-2.868529	
10% level	-2.570558	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(WTIPRICE) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-20.76957	0.0000
Test critical values:		
1% level	-3.446443	
5% level	-2.868529	
10% level	-2.570558	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(NICKELPRICE) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=17)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-20.75352	0.0000
Test critical values:		
1% level	-3.446443	
5% level	-2.868529	
10% level	-2.570558	

*MacKinnon (1996) one-sided p-values.

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3. UJI LAG

VAR Lag Order Selection Criteria
 Endogenous variables: D(INDEKSMING) D(COAL) D(GOLDPRICE) D(WTIPRICE)
 D(NICKELPRICE)
 Exogenous variables: C
 Date: 11/13/17 Time: 20:27
 Sample: 1 403
 Included observations: 401

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-5823.194	NA	2896208.	29.06830	29.11810*	29.08802*
1	-5785.760	73.74715*	2722090.*	29.00628*	29.30508	29.12460

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

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4. PENGUJIAN STABILITAS VAR

Roots of Characteristic Polynomial
Endogenous variables: D(INDEKSMING) D(COAL)
D(GOLDPRICE) D(WTIPRICE) D(NICKELPRICE)
Exogenous variables: C
Lag specification: 1 2
Date: 11/13/17 Time: 20:28

Root	Modulus
-0.046447 - 0.427898i	0.430411
-0.046447 + 0.427898i	0.430411
0.416405	0.416405
-0.382009	0.382009
0.348175	0.348175
-0.292481 - 0.129050i	0.319686
-0.292481 + 0.129050i	0.319686
0.223090	0.223090
0.031756 - 0.151448i	0.154741
0.031756 + 0.151448i	0.154741

No root lies outside the unit circle.
VAR satisfies the stability condition.

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5. UJI KOINTEGRASI

Date: 11/13/17 Time: 20:32
Sample (adjusted): 4 403
Included observations: 400 after adjustments
Trend assumption: Linear deterministic trend
Series: D(INDEKSMING) D(COAL) D(GOLDPRICE) D(WTIPRICE) D(NICKELPRICE)
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.449762	812.8623	69.81889	0.0001
At most 1 *	0.365017	573.9009	47.85613	0.0001
At most 2 *	0.310956	392.2380	29.79707	0.0001
At most 3 *	0.281832	243.2579	15.49471	0.0001
At most 4 *	0.242016	110.8373	3.841466	0.0000

Trace test indicates 5 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

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6. UJI KAUSALITAS GRANGER

Pairwise Granger Causality Tests

Date: 11/13/17 Time: 20:33

Sample: 1 403

Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
COAL does not Granger Cause INDEKSMING	402	2.75361	0.0978
INDEKSMING does not Granger Cause COAL		0.62444	0.4299
GOLDPRICE does not Granger Cause INDEKSMING	402	1.53138	0.2166
INDEKSMING does not Granger Cause GOLDPRICE		0.82108	0.3654
WTIPRICE does not Granger Cause INDEKSMING	402	2.53809	0.1119
INDEKSMING does not Granger Cause WTIPRICE		1.69157	0.1941
NICKELPRICE does not Granger Cause INDEKSMING	402	0.73585	0.3915
INDEKSMING does not Granger Cause NICKELPRICE		0.65217	0.4198
GOLDPRICE does not Granger Cause COAL	402	4.73276	0.0302
COAL does not Granger Cause GOLDPRICE		2.39496	0.1225
WTIPRICE does not Granger Cause COAL	402	1.19302	0.2754
COAL does not Granger Cause WTIPRICE		0.76568	0.3821
NICKELPRICE does not Granger Cause COAL	402	0.51487	0.4735
COAL does not Granger Cause NICKELPRICE		1.97364	0.1608
WTIPRICE does not Granger Cause GOLDPRICE	402	0.15961	0.6897
GOLDPRICE does not Granger Cause WTIPRICE		0.65774	0.4178
NICKELPRICE does not Granger Cause GOLDPRICE	402	2.07707	0.1503
GOLDPRICE does not Granger Cause NICKELPRICE		2.87303	0.0909
NICKELPRICE does not Granger Cause WTIPRICE	402	1.35376	0.2453
WTIPRICE does not Granger Cause NICKELPRICE		0.02864	0.8657

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7. MENDAPATKAN MODEL VECM

Vector Error Correction Estimates

Date: 11/13/17 Time: 20:35

Sample (adjusted): 4 403

Included observations: 400 after adjustments

Standard errors in () & t-statistics in []

Cointegrating Eq:	CointEq1				
D(INDEKSMING(-1))	1.000000				
D(COAL(-1))	3.248809 (1.14170) [2.84559]				
D(GOLDPRICE(-1))	-0.732349 (0.08383) [-8.73619]				
D(WTIPRICE(-1))	-0.444793 (0.90549) [-0.49122]				
D(NICKELPRICE(-1))	-0.728286 (0.08255) [-8.82234]				
C	-1.194841				

Error Correction:	D(INDEKSMIN G,2)	D(COAL,2)	D(GOLDPRICE, 2)	D(WTIPRICE,2)	D(NICKELPRIC E,2)
CointEq1	-0.906668 (0.06534) [-13.8772]	-0.007110 (0.00378) [-1.88186]	0.310665 (0.05455) [5.69500]	-0.004914 (0.00576) [-0.85270]	0.201102 (0.06021) [3.33976]
D(INDEKSMING(-1),2)	-0.024234 (0.04605) [-0.52629]	0.004619 (0.00266) [1.73467]	-0.192043 (0.03845) [-4.99514]	-0.002750 (0.00406) [-0.67717]	-0.102609 (0.04244) [-2.41785]
D(COAL(-1),2)	1.685126 (0.74967) [2.24783]	-0.513941 (0.04335) [-11.8550]	-1.093140 (0.62592) [-1.74645]	-0.073911 (0.06612) [-1.11782]	0.015688 (0.69091) [0.02271]
D(GOLDPRICE(-1),2)	-0.284376 (0.05734) [-4.95907]	0.000127 (0.00332) [0.03821]	-0.365215 (0.04788) [-7.62790]	-0.002798 (0.00506) [-0.55317]	0.163183 (0.05285) [3.08765]
D(WTIPRICE(-1),2)	2.164745 (0.51142) [4.23278]	0.002741 (0.02957) [0.09267]	1.000175 (0.42700) [2.34231]	-0.534908 (0.04511) [-11.8585]	-0.099125 (0.47134) [-0.21030]
D(NICKELPRICE(-1),2)	-0.258288	-0.000837	0.157289	0.005525	-0.454670

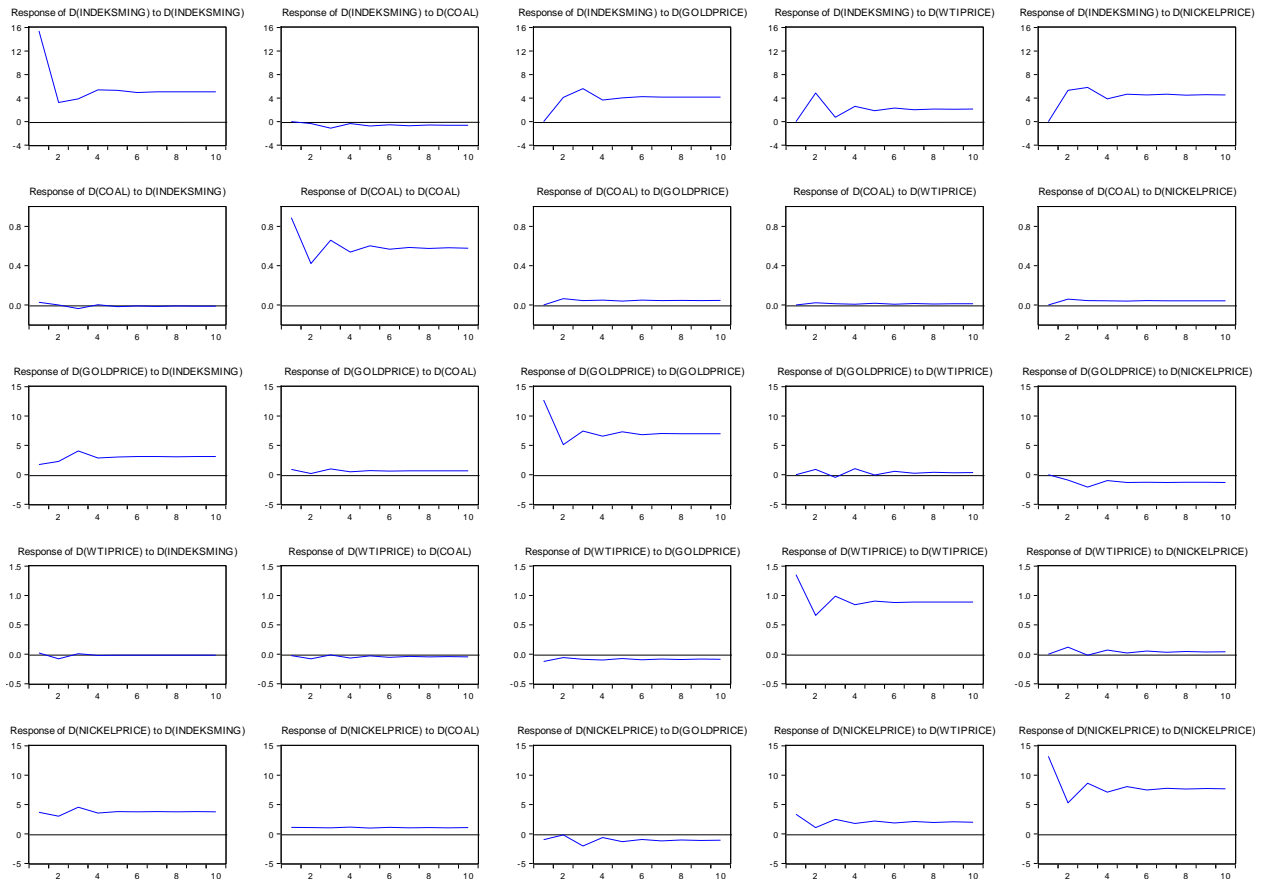
	(0.05292)	(0.00306)	(0.04418)	(0.00467)	(0.04877)
	[-4.88092]	[-0.27358]	[3.55995]	[1.18386]	[-9.32264]
C	-0.053351	-0.000199	-0.023974	0.008657	-0.014672
	(0.77009)	(0.04453)	(0.64297)	(0.06792)	(0.70973)
	[-0.06928]	[-0.00448]	[-0.03729]	[0.12745]	[-0.02067]
R-squared	0.515965	0.280504	0.328760	0.271419	0.324509
Adj. R-squared	0.508575	0.269519	0.318512	0.260296	0.314196
Sum sq. resids	93224.39	311.7570	64987.75	725.2132	79184.04
S.E. equation	15.40169	0.890660	12.85936	1.358428	14.19458
F-statistic	69.82083	25.53590	32.08063	24.40082	31.46646
Log likelihood	-1657.835	-517.7273	-1585.673	-686.5756	-1625.188
Akaike AIC	8.324177	2.623637	7.963367	3.467878	8.160942
Schwarz SC	8.394028	2.693487	8.033217	3.537729	8.230793
Mean dependent	-0.037775	-0.001250	-0.013500	0.008175	-0.006750
S.D. dependent	21.97050	1.042095	15.57724	1.579456	17.14046
Determinant resid covariance (dof adj.)		9689216.			
Determinant resid covariance		8870568.			
Log likelihood		-6037.527			
Akaike information criterion		30.38763			
Schwarz criterion		30.78678			

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8. ANALISIS IRF

Period	D(INDEKSMING)	Response of D(INDEKSMING):			
		D(COAL)	D(GOLDPRICE)	D(WTIPRICE)	D(NICKELPRICE)
1	15.40169	0.000000	0.000000	0.000000	0.000000
2	3.219410	-0.368638	4.119224	4.827128	5.310335
3	3.844083	-1.148272	5.578695	0.740788	5.787522
4	5.384758	-0.350963	3.651486	2.592159	3.858778
5	5.304184	-0.757568	4.033893	1.829124	4.630009
6	4.911157	-0.547845	4.224798	2.286049	4.500839
7	5.035943	-0.703115	4.138502	1.999100	4.621065
8	5.067370	-0.588469	4.134459	2.136536	4.469244
9	5.052136	-0.659790	4.125830	2.084901	4.568577
10	5.040535	-0.618684	4.150154	2.104160	4.521385

Response to Cholesky One S.D. Innovations



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9. ANALISIS VD

Variance Decomposition
of D(INDEKSMING):

Period	S.E.	D(INDEKSMING)	D(COAL)	D(GOLDPRICE)	D(WTIPRICE)	D(NICKELPRICE)
1	15.40169	100.0000	0.000000	0.000000	0.000000	0.000000
2	17.78149	78.30211	0.042980	5.366540	7.369553	8.918819
3	19.93597	66.01041	0.365945	12.09981	6.000843	15.52300
4	21.48266	63.13033	0.341838	13.30933	6.623816	16.59468
5	23.04925	60.13609	0.404976	14.62454	6.383768	18.45062
6	24.47488	57.36090	0.409275	15.95012	6.534161	19.74555
7	25.83317	55.28768	0.441447	16.88336	6.463946	20.92356
8	27.11107	53.69207	0.447927	17.65491	6.489994	21.71510
9	28.34097	52.31084	0.464091	18.27513	6.480109	22.46983
10	29.51431	51.15096	0.471866	18.82822	6.483385	23.06557

