

# **LAMPIRAN**

## LAMPIRAN I

### ■ DATA PENELITIAN SEBELUM PERANG DAGANG

TANGGAL	DJIA	SSE	IHSG
01-12-17	24231.59	3317.617	5952.138
04-12-17	24290.05	3309.618	5998.195
05-12-17	24180.64	3303.675	6000.474
06-12-17	24140.91	3293.965	6035.508
07-12-17	24211.48	3272.054	6006.835
08-12-17	24329.16	3289.992	6030.958
11-12-17	24386.03	3322.196	6026.633
12-12-17	24504.8	3280.814	6032.371
13-12-17	24585.43	3303.037	6054.604
14-12-17	24508.66	3292.439	6113.653
15-12-17	24651.74	3266.137	6119.419
18-12-17	24792.2	3267.922	6133.963
19-12-17	24754.75	3296.538	6167.666
20-12-17	24726.65	3287.606	6109.482
21-12-17	24782.29	3300.059	6183.391
22-12-17	24754.06	3297.063	6221.013
27-12-17	24774.3	3275.783	6277.165
28-12-17	24837.51	3296.385	6314.046
29-12-17	24719.22	3307.172	6355.654
02-01-18	24824.01	3348.326	6339.238
03-01-18	24922.68	3369.108	6251.479
04-01-18	25075.13	3385.71	6292.321
05-01-18	25295.87	3391.75	6353.738
08-01-18	25283	3409.48	6385.404
09-01-18	25385.8	3413.9	6373.144
10-01-18	25369.13	3421.834	6371.174
11-01-18	25574.73	3425.345	6386.339
12-01-18	25803.19	3428.941	6370.065
16-01-18	25792.86	3436.594	6429.692
17-01-18	26115.65	3444.671	6444.518
18-01-18	26017.81	3474.754	6472.666
19-01-18	26071.72	3487.864	6490.896
22-01-18	26214.6	3501.362	6500.529

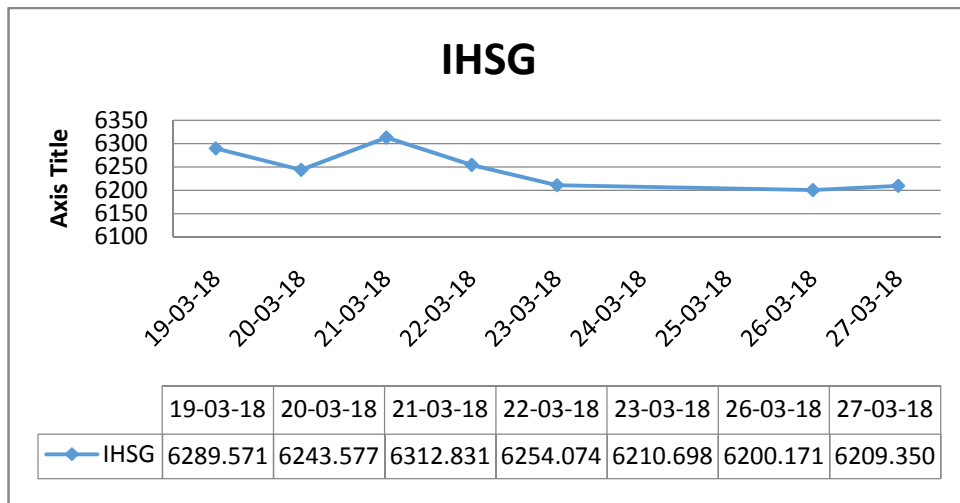
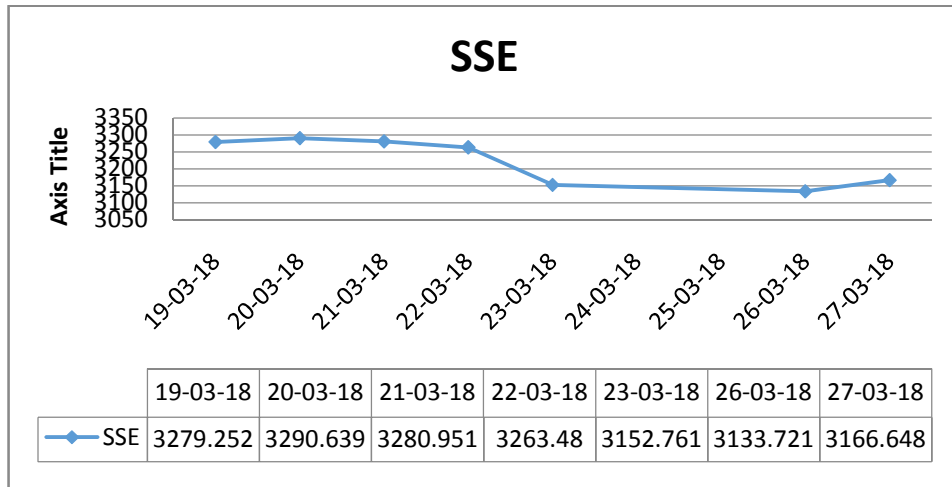
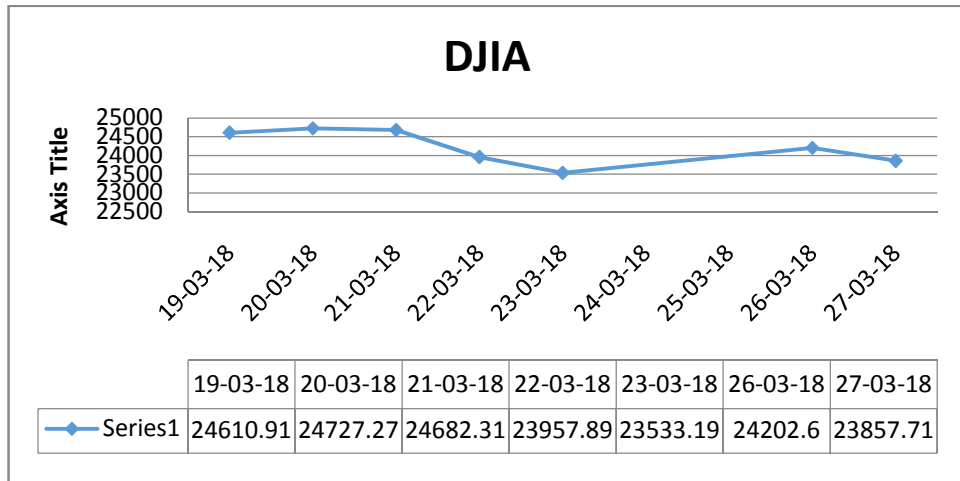
23-01-18	26210.81	3546.505	6635.334
24-01-18	26252.12	3559.465	6615.492
25-01-18	26392.79	3548.307	6615.328
26-01-18	26616.71	3558.129	6660.618
29-01-18	26439.48	3523.001	6680.619
30-01-18	26076.89	3488.009	6575.492
31-01-18	26149.39	3480.833	6605.631
01-02-18	26186.71	3446.98	6598.459
02-02-18	25520.96	3462.081	6628.82
05-02-18	24345.75	3487.497	6589.675
06-02-18	24912.77	3370.652	6478.543
07-02-18	24893.35	3309.26	6534.869
08-02-18	23860.46	3262.05	6544.634
09-02-18	24190.9	3129.851	6505.523
12-02-18	24601.27	3154.125	6523.454
13-02-18	24640.45	3184.959	6578.178
14-02-18	24893.49	3199.159	6594.401
22-02-18	24962.48	3268.559	6593.06
23-02-18	25309.99	3289.024	6619.804
26-02-18	25709.27	3329.574	6598.926
27-02-18	25410.03	3292.068	6598.926
28-02-18	25029.2	3259.408	6597.218
01-03-18	24608.98	3273.755	6606.053
02-03-18	24538.06	3254.528	6582.316
05-03-18	24874.76	3256.926	6550.593
06-03-18	24884.12	3289.642	6500.111
07-03-18	24801.36	3271.668	6368.267
08-03-18	24895.21	3288.406	6443.021
09-03-18	25335.74	3307.166	6433.322
12-03-18	25178.61	3326.699	6500.686
13-03-18	25007.03	3310.239	6412.846
14-03-18	24758.12	3291.382	6382.623
15-03-18	24873.66	3291.112	6321.904
16-03-18	24946.51	3269.882	6304.952
19-03-18	24610.91	3279.252	6289.572
20-03-18	24727.27	3290.64	6243.577
21-03-18	24682.31	3280.952	6312.831

■ DATA PENELITIAN PADA MASA PERANG DAGANG

TANGGAL	DJIA	SSE	IHSG
22-03-18	23957.89	3263.48	6254.074
23-03-18	23533.2	3152.761	6210.698
26-03-18	24202.6	3133.722	6200.172
27-03-18	23857.71	3166.649	6209.35
28-03-18	23848.42	3122.29	6140.837
29-03-18	24103.11	3160.531	6188.987
02-04-18	23644.19	3163.179	6240.571
03-04-18	24033.36	3136.633	6229.013
04-04-18	24264.3	3131.111	6157.096
09-04-18	23979.1	3138.294	6246.131
10-04-18	24408	3190.322	6325.818
11-04-18	24189.45	3208.082	6360.932
12-04-18	24483.05	3180.158	6310.802
13-04-18	24360.14	3159.052	6270.327
16-04-18	24573.04	3110.649	6286.748
17-04-18	24786.63	3066.797	6285.762
18-04-18	24748.07	3091.399	6320.005
19-04-18	24664.89	3117.376	6355.901
20-04-18	24462.94	3071.543	6337.695
23-04-18	24448.69	3068.012	6308.148
24-04-18	24024.13	3128.927	6229.635
25-04-18	24083.83	3117.974	6079.85
26-04-18	24322.34	3075.03	5909.198
27-04-18	24311.19	3082.232	5919.238
02-05-18	23924.98	3081.177	6012.238
03-05-18	23930.15	3100.859	5858.732
04-05-18	24262.51	3091.033	5792.345
07-05-18	24357.32	3136.645	5885.098
08-05-18	24360.21	3161.498	5774.716
09-05-18	24542.54	3159.15	5907.938
11-05-18	24831.17	3163.263	5956.832
14-05-18	24899.41	3174.032	5947.155
15-05-18	24706.41	3192.118	5838.116
16-05-18	24768.93	3169.565	5841.464
17-05-18	24713.98	3154.283	5815.92
18-05-18	24715.09	3193.303	5783.31
21-05-18	25013.29	3213.84	5733.854

22-05-18	24834.41	3214.35	5751.119
23-05-18	24886.81	3168.964	5792.001
24-05-18	24811.76	3154.651	5946.538
25-05-18	24753.09	3141.303	5975.742
30-05-18	24667.78	3041.443	6011.055
31-05-18	24415.84	3095.474	5983.587
04-06-18	24813.69	3091.191	6014.819
05-06-18	24799.98	3114.206	6088.79
06-06-18	25146.39	3115.18	6069.713
07-06-18	25241.41	3109.499	6106.698
08-06-18	25316.53	3067.148	5993.627
20-06-18	24657.8	2915.731	5884.039

■ **GRAFIK HARGA SAHAM DJIA, SSE, DAN IHSG MARET 2018**



■ **TABEL KRONOLOGI TERJADINYA PERANG DAGANG JANUARI 2018 – JUNI 2018.**

Tanggal	Peristiwa
22 Januari 2018	Trump mengumumkan tarif import bagi sel surya impor dan mesin cuci tertentu. Hal ini mendapatkan kritikan dari pihak Cina.
2 Maret 2018	Trump mendukung adanya perang dagang. Trump memposting di akun Twitternya bahwa perang dagang sangat mudah untuk dimenangkan.
8 Maret 2018	Trump menandatangani 25% tarif untuk baja dan 10% bea masuk atas aluminium.
22 Maret 2018	Presiden Amerika Serikat, Donald Trump menyatakan bahwa akan memberikan bea masuk sebesar US \$50 miliar pada barang- barang dari Cina dengan acuan pada Undang- Undang Amerika Serikat pasal 301 tahun 1974 tentang perdagangan.
1 April 2018	Cina menaikkan tarif untuk produk daging babi dan skrap aluminium sebesar 25%. Beijing juga melakukan kenaikan tarif 10% untuk 128 produk komoditas Amerika
3 April 2018	Kantor Perwakilan Perdagangan Amerika merilis daftar tarif yang diusulkan untuk barang- barang Impor Cina.
4 April 2018	Kementerian Perdagangan Cina merilis daftar produk yang dikenai tarif sebanyak 106 produk Amerika.

5 April 2018	Trump mengatakan bahwa dia telah meminta Perwakilan Perdagangan Amerika untuk mempertimbangkan tarif tambahan senilai US\$100 miliar terhadap produk Cina.
6 April 2018	Pemerintahan Cina mengatakan jika pihak Amerika menaikkan tarif atas produk Cina, maka pihak Cina juga akan melakukan tindakan balasan atau serupa.
10 April 2018	Cina mengeluhkan kenaikan tarif untuk impor baja dan aluminium yang dilakukan negara Amerika kepada WTO. Pada hari yang sama Pemerintahan Cina menyampaikan tentang rencana untuk meningkatkan kegiatan import, menurunkan tarif impor mobil, membuka industri keuangan untuk asing , dan meningkatkan perlindungan atas kekayaan intelektual. Pidato Pemerintah Cina ini secara tidak langsung membahas sengketa perdagangan dengan Amerika.
16 April 2018	Pihak Amerika melarang perusahaan peralatan telekomunikasi ZTE untuk membeli komponen dari Amerika selama 7 tahun karena dianggap telah melanggar kesepakatan dengan mengirim secara illegal ke negara Iran dan Korea Utara. Perdagangan saham ZTE kemudian dihentikan di Hongkong dan Shenzhen.
3 Mei 2018	Delegasi dari Amerika dan Cina mengadakan pembicaraan tentang perdagangan di Beijing. Namun upaya negosiasi ini tidak menghasilkan solusi untuk penyelesaian perselisihan antara dua negara tersebut.
13 Mei 2018	Presiden Trump memposting di akun twitternya bahwa



	dirinya dan pemerintahan Cina akan membantu kegiatan bisnis ZTE secepatnya.
18 Mei 2018	Cina mengumumkan akan mengakhiri penyelidikan anti dumping terhadap impor sorgum Amerika. Sebelumnya pada hari itu para pejabat Amerika dalam pembicaraan perdagangan mengatakan bahwa Beijing menawarkan paket untuk mengurangi defisit perdagangan Amerika sebesar US\$200 Miliar menurut Reuters dan media lainnya. Namun kemudian Kementerian Luar Negeri Cina mengatakan bahwa hal tersebut tidak benar.
19 Mei 2018	Dalam sebuah pernyataan bersama Amerika dan Cina setuju untuk meningkatkan ekspor pertanian dan energy Amerika serta meningkatkan barang dan layanan Amerika secara keseluruhan dan signifikan.
20 Mei 2018	Perang dagang ditangguhkan untuk sementara. Menteri perdagangan Amerika mengatakan hal tersebut pada Fox News Sunday.
22 Mei 2018	Cina mengatakan bahwa akan menurunkan tarif impor mobil hingga 15% dari sebelumnya 25% yang akan dilaksanakan mulai 1 Juli 2018. Namun di hari yang sama Trump mengatakan bahwa tidak puas terhadap hasil dari negosiasi minggu lalu dan mengatakn hal tersebut hanya awal.
23 Mei 2018	Trump mengatakan di akun Twitternya bahwa pembicaraan perdagangan dengan Cina mungkin harus mengarah ke hal baru untuk mendapatkan resolusi.

29 Mei 2018	Trump dalam sebuah pernyataan di situs Gedung Putih Amerika Serikat mengatakan bahwa akan menambahkan tarif 25% pada impor Cina senilai US\$50 miliar, menyoroti produk yang terkait dengan program “ <i>Made In China 2025</i> ”
31 Mei 2018	Menjelang kunjungan Menteri Perdagangan Amerika Wilbur Ross, Cina mengumumkan akan memotong tarif pada 1 Juli untuk 1.499 lini produk.
4 Juni 2018	<p>Menteri Perdagangan Amerika Serikat, Wilbur Ross mengakhiri pertemuan di Beijing tanpa perjanjian khusus tentang perdagangan. Kedua pihak membicarakan tentang mengurangi defisit Amerika dengan meningkatkan pasokan terkait produk pertanian dan energi ke Cina, menurut pernyataan Gedung Putih.</p> <p>Beijing bersedia meningkatkan impor dari Amerika dan negara lain. Namun hasil negosiasi perdagangan tidak akan berlaku jika Amerika tetap memberlakukan tarif.</p>
6 Juni 2018	Perwakilan Cina mengusulkan proposal paket senilai US\$70 miliar dalam pembelian tahun pertama, jika Trump membatalkan peneraan tarif. Proposal itu termasuk peningkatan pembelian kedelai, jagung, gas alam, minyak mentah, dan batu bara Cina.
7 Juni 2018	ZTE menyelesaikan permasalahan dengan Amerika Serikat dengan membayar US\$1,4 miliar karena melanggar perjanjian Maret 2017. Permasalahan tersebut akan selesai jika pihak perusahaan telekomunikasi Cina tersebut membayarkan denda tersebut, jika tidak

	<p>perusahaan tersebut tetap dilarang membeli komponen dari perusahaan Amerika.</p>
12 Juni 2018	<p>Saham ZTE anjlok sebesar 40% di Hongkong saat diperjualkan kembali setelah hampir dua bulan berhenti diperdagangkan.</p>
15 Juni 2018	<p>Kantor Perwakilan Perdagangan Amerika Serikat merilis daftar 1.102 barang impor Cina senilai sekitar US\$50 miliar. Tarif 25% untuk 818 produk ini sekitar US\$34 miliar akan berlaku mulai 6 Juli. 284 produk lainnya bernilai US\$16 miliar akan menjalani proses uji publik sebelum keputusan akhir ditetapkan.</p> <p>Cina menanggapi hal tersebut dengan membuat daftar 545 impor Amerika senilai US\$34 miliar yang akan dikenakan tarif 25% pada 6 Juli. Produk yang masuk dalam daftar ini adalah produk kacang kedelai, kendaraan listrik, dan makanan laut. Beijing juga mneyatakan akan memberlakukan tarif tambahan pada 114 produk Amerika termasuk alat pencitraan resonansi minyak, dieseil, dan magnetik. Secara keseluruhan jumlah barang tersebut adalah 659 senilai US\$50 miliar.</p>

18 Juni 2018	<p>Senat Amerika meloloskan RUU Pendanaan Militer dengan ketentuan yang memberlakukan kembali larangan pembelian komponen oleh ZTE dari perusahaan Amerika. Di malam hari Trump mengatakan dia telah mengarahkan Perwakilan Perdagangan Amerika untuk mengidentifikasi barang-barang Cina senilai US\$200 miliar untuk dikenai tarif tambahan sebesar 10%. Tarif ini akan berlaku jika pihak Cina tidak mengubah praktiknya dan menetapkan tarif yang diumumkan. Kementerian perdagangan Cina mengatakan bahwa Pihak Amerika Serikat telah memulai perang dagang dan pihak Cina akan melindungi kepentingannya.</p>
--------------	---

## LAMPIRAN II ( SEBELUM PERANG DAGANG)

### ■ UJI STASIONERITAS

#### DJIA

Null Hypothesis: DJIA has a unit root

Exogenous: Constant

Lag Length: 3 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.338226	0.1634
Test critical values: 1% level	-3.533204	
5% level	-2.906210	
10% level	-2.590628	

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

Null Hypothesis: D(DJIA) has a unit root

Exogenous: Constant

Lag Length: 2 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.720347	0.0059
Test critical values: 1% level	-3.533204	
5% level	-2.906210	
10% level	-2.590628	

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

## SSE

Null Hypothesis: SSE has a unit root

Exogenous: Constant

Lag Length: 4 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.523204	0.5157
Test critical values: 1% level	-3.534868	
5% level	-2.906923	
10% level	-2.591006	

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

Null Hypothesis: D(SSE) has a unit root

Exogenous: Constant

Lag Length: 3 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.787470	0.0002
Test critical values: 1% level	-3.534868	
5% level	-2.906923	
10% level	-2.591006	

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

## IHSG

Null Hypothesis: IHSG has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.144136	0.2285
Test critical values: 1% level	-3.528515	
5% level	-2.904198	
10% level	-2.589562	

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

Null Hypothesis: D(IHSG) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-8.616138	0.0000
Test critical values: 1% level	-3.530030	
5% level	-2.904848	
10% level	-2.589907	

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

## ■ UJI LAG OPTIMUM

VAR Lag Order Selection

Criteria

Endogenous variables: IHSG DJIA SSE

Exogenous variables: C

Date: 03/22/20 Time: 21:20

Sample: 1 70

Included observations: 60

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1178.462	NA	2.55e+13	39.38206	39.48677	39.42302
1	-1015.418	304.3488	1.50e+11	34.24725	34.66612*	34.41110*
2	-1004.026	20.12468	1.39e+11	34.16754	34.90056	34.45427
3	-995.9347	13.48606	1.44e+11	34.19782	35.24500	34.60743
4	-983.8814	18.88343	1.32e+11	34.09605	35.45737	34.62854
5	-972.5604	16.60420	1.24e+11*	34.01868	35.69416	34.67405
6	-966.1994	8.693345	1.39e+11	34.10665	36.09627	34.88490
7	-963.5236	3.389390	1.79e+11	34.31745	36.62123	35.21859
8	-944.7565	21.89487	1.37e+11	33.99188	36.60982	35.01590
9	-940.5332	4.504852	1.72e+11	34.15111	37.08319	35.29801
10	-922.8209	17.12191*	1.42e+11	33.86070*	37.10693	35.13048

\* 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



■ UJI STABILITAS VAR

Roots of Characteristic Polynomial  
 Endogenous variables: IHSG DJIA SSE  
 Exogenous variables: C  
 Lag specification: 1 10  
 Date: 03/22/20 Time: 21:19

Root	Modulus
-0.917659 - 0.351686i	0.982741
-0.917659 + 0.351686i	0.982741
0.730994 + 0.645478i	0.975189
0.730994 - 0.645478i	0.975189
0.965353 + 0.106489i	0.971208
0.965353 - 0.106489i	0.971208
0.856414 + 0.400489i	0.945429
0.856414 - 0.400489i	0.945429
0.560437 + 0.733793i	0.923332
0.560437 - 0.733793i	0.923332
-0.408305 - 0.826395i	0.921760
-0.408305 + 0.826395i	0.921760
0.882881 + 0.205194i	0.906413
0.882881 - 0.205194i	0.906413
0.026019 + 0.905227i	0.905601
0.026019 - 0.905227i	0.905601
-0.650578 + 0.579317i	0.871125
-0.650578 - 0.579317i	0.871125
0.815977	0.815977
-0.184381 - 0.787601i	0.808896
-0.184381 + 0.787601i	0.808896
0.264228 - 0.756295i	0.801123
0.264228 + 0.756295i	0.801123
-0.708364	0.708364
-0.402522 + 0.557546i	0.687664
-0.402522 - 0.557546i	0.687664
-0.379718 + 0.390633i	0.544774
-0.379718 - 0.390633i	0.544774
-0.089067 + 0.296431i	0.309523
-0.089067 - 0.296431i	0.309523

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

■ **UJI KOINTEGRASI**

Date: 03/22/20 Time: 21:22  
 Sample (adjusted): 12 70  
 Included observations: 59 after adjustments  
 Trend assumption: Linear deterministic trend  
 Series: IHSG DJIA SSE  
 Lags interval (in first differences): 1 to 10

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.488945	58.35264	29.79707	0.0000
At most 1 *	0.214356	18.74727	15.49471	0.0156
At most 2 *	0.073646	4.513439	3.841466	0.0336

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

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

■ **UJI GRANGER (CONTAGION EFFECT)**

Pairwise Granger Causality Tests

Date: 04/12/20 Time: 19:33

Sample: 1 70

Lags: 10

Null Hypothesis:	Obs	F-Statistic	Prob.
DJIA does not Granger Cause IHSG	60	1.98398	0.0623
IHSG does not Granger Cause DJIA		1.39199	0.2201
SSE does not Granger Cause IHSG	60	1.12285	0.3705
IHSG does not Granger Cause SSE		0.87506	0.5635
SSE does not Granger Cause DJIA	60	1.51883	0.1695
DJIA does not Granger Cause SSE		3.90616	0.0010

■ IRF

Response of IHSG:			
Period	IHSG	DJIA	SSE
1	49.03679	0.000000	0.000000
2	38.20326	16.75556	-11.36723
3	35.51937	15.14597	-9.964897
4	26.71624	11.84893	-4.050376
5	31.98807	18.20250	-7.685880
6	40.19706	19.99393	-5.663381
7	40.20393	16.04429	2.422308
8	45.41433	7.465357	-5.641599
9	41.23454	12.18369	-8.496636
10	37.68338	11.24283	-7.482449
11	12.22742	9.067193	-4.661066
12	22.20213	5.152201	-1.676009
13	22.20059	8.122043	0.604992
14	17.48699	11.01731	3.425932
15	18.85676	13.31788	3.282251
16	20.36462	16.84937	4.561996
17	27.41257	14.99941	2.718600
18	17.78946	18.96786	5.437548
19	26.39208	13.49812	9.460959
20	23.79446	11.68211	13.55923

Response of DJIA:			
Period	IHSG	DJIA	SSE
1	62.57148	212.3204	0.000000
2	127.0437	179.0644	64.72725
3	162.8517	66.52935	120.1162
4	249.3173	134.6142	75.19331
5	304.8522	144.8540	91.32357
6	260.0290	112.8820	132.2191
7	233.3555	39.20152	91.07489
8	284.0849	-1.076497	84.53881
9	200.5297	13.69830	71.43249
10	8.098093	0.292550	78.67001
11	79.75092	-34.53919	94.43107
12	94.70068	-15.86482	44.79343
13	20.19335	26.98774	9.968841
14	-17.24052	49.42602	10.07032
15	-30.12063	30.04798	1.311253
16	22.23728	21.59303	-17.01618
17	12.65284	48.26098	-2.510545
18	6.385304	19.16727	20.39541
19	-1.041468	7.541757	29.55580

	20	35.69812	4.048829	29.00672
Response of SSE:				
Period	IHSG	DJIA	SSE	
1	8.672185	-4.865555	19.36445	
2	15.29372	5.284326	17.35991	
3	22.94780	12.98183	18.45687	
4	28.95584	16.11277	24.01156	
5	26.88340	27.56147	15.09211	
6	36.04367	22.89857	11.52771	
7	40.42045	17.77616	15.60954	
8	34.88811	9.880675	13.15700	
9	40.67921	1.548302	15.68200	
10	35.61176	3.650842	18.70202	
11	20.75119	0.108147	17.81310	
12	14.91132	1.678876	17.01243	
13	10.58562	5.288561	11.60556	
14	1.033218	3.851168	7.619057	
15	2.876246	2.389262	3.772641	
16	1.743646	0.003020	-0.756747	
17	1.005963	-2.355456	-1.078828	
18	-3.604279	-1.947365	-0.482731	
19	-9.488196	-1.806363	2.304685	
20	-7.890519	-1.269697	4.528311	
Cholesky Ordering: IHSG DJIA SSE				

■ FEVD

Variance Decomposition of IHSG:				
Period	S.E.	IHSG	DJIA	SSE
1	49.03679	100.0000	0.000000	0.000000
2	65.37628	90.40811	6.568674	3.023216
3	76.57926	87.40426	8.699114	3.896627
4	82.06670	86.70419	9.659271	3.636537
5	90.26951	84.21972	12.04967	3.730605
6	100.9763	83.15356	13.55046	3.295981
7	109.8902	83.59548	13.57298	2.831541
8	119.2723	85.45928	11.91339	2.627328
9	127.0701	85.82270	11.41543	2.761868

10	133.2262	86.07506	11.09698	2.827956
11	134.1741	85.69375	11.39743	2.908823
12	136.1065	85.93864	11.21939	2.841975
13	138.1455	86.00307	11.23631	2.760618
14	139.7250	85.63590	11.60543	2.758673
15	141.6573	85.08754	12.17485	2.737613
16	144.1743	84.13773	13.11928	2.742985
17	147.5468	83.78717	13.55985	2.652974
18	149.9195	82.56402	14.73477	2.701212
19	153.1147	82.12517	14.90338	2.971452
20	155.9827	81.45990	14.92127	3.618829
21	160.0394	81.04882	14.56718	4.383991
22	163.5800	80.38563	14.35322	5.261147
23	166.6488	79.52215	14.22924	6.248611
24	169.0899	79.06384	14.04109	6.895074
25	170.8838	78.45660	14.00410	7.539296

---

Variance  
Decomposition  
of DJIA:

Period	S.E.	IHSG	DJIA	SSE
1	221.3484	7.990977	92.00902	0.000000
2	318.4162	19.78056	76.08721	4.132224
3	383.0974	31.73536	55.57926	12.68538
4	482.3876	46.72802	42.84147	10.43051
5	595.7812	56.81558	33.99691	9.187512
6	672.9001	59.47178	29.46505	11.06317
7	719.0833	62.60913	26.09900	11.29187
8	777.7744	66.85766	22.30893	10.83341
9	806.4957	68.36285	20.77712	10.86003
10	810.3641	67.72172	20.57924	11.69905
11	820.4635	67.00958	20.25294	12.73748
12	827.2767	67.22079	19.95749	12.82172
13	828.0231	67.15913	20.02776	12.81311
14	829.7372	66.92511	20.29994	12.77495
15	830.8283	66.88088	20.37745	12.74167
16	831.5804	66.83146	20.40803	12.76050
17	833.0795	66.61422	20.67025	12.71553
18	833.5740	66.54108	20.69861	12.76031
19	834.1326	66.45215	20.67907	12.86878
20	835.4097	66.43173	20.61824	12.95002
21	835.9416	66.36755	20.59203	13.04042
22	836.8203	66.36789	20.55026	13.08185
23	837.9637	66.32066	20.60674	13.07260
24	839.6364	66.18868	20.77898	13.03234
25	841.9542	66.04463	20.98451	12.97086

---

Variance  
Decomposition  
of SSE:

Period	S.E.	IHSG	DJIA	SSE
1	21.76838	15.87102	4.995886	79.13309
2	32.20327	29.80613	4.975428	65.21845
3	45.52841	40.31704	10.61954	49.06343
4	61.21645	44.67426	12.80194	42.52380
5	73.87541	43.91810	22.70938	33.37252
6	86.10433	49.85207	23.78927	26.35866
7	98.01744	55.47612	21.64700	22.87687
8	105.3344	59.00682	19.62398	21.36920
9	114.0108	63.09829	16.76925	20.13246
10	120.9535	64.73113	14.99050	20.27837
11	124.0068	64.38302	14.26148	21.35551
12	126.0645	63.69740	13.81743	22.48518
13	127.1494	63.30815	13.75564	22.93621
14	127.4399	63.02646	13.78433	23.18921
15	127.5505	62.96801	13.79551	23.23648
16	127.5647	62.97271	13.79245	23.23484
17	127.5950	62.94905	13.81998	23.23096
18	127.6616	62.96304	13.82882	23.20814
19	128.0472	63.13347	13.76556	23.10097
20	128.3763	63.18802	13.70487	23.10712
21	128.8966	63.34148	13.60300	23.05552
22	129.1689	63.42009	13.54670	23.03321
23	129.3538	63.51889	13.50818	22.97293
24	129.5475	63.53135	13.53547	22.93318
25	129.9666	63.43259	13.69654	22.87087

Cholesky  
Ordering: IHSG  
DJIA SSE

### LAMPIRAN III (PADA MASA PERANG DAGANG)

#### ■ UJI STASIONERITAS

##### DJIA

Null Hypothesis: DJIA has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.493296	0.1234
Test critical values: 1% level	-3.574446	
5% level	-2.923780	
10% level	-2.599925	

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

Null Hypothesis: D(DJIA) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-9.800648	0.0000
Test critical values: 1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

## SSE

Null Hypothesis: SSE has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.943241	0.3103
Test critical values: 1% level	-3.574446	
5% level	-2.923780	
10% level	-2.599925	

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

Null Hypothesis: D(SSE) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.808642	0.0000
Test critical values: 1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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



## IHSG

Null Hypothesis: IHSG has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.315877	0.6148
Test critical values: 1% level	-3.574446	
5% level	-2.923780	
10% level	-2.599925	

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

Null Hypothesis: D(IHSG) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=10)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.741705	0.0000
Test critical values: 1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

## ■ UJI LAG OPTIMUM

VAR Lag Order Selection Criteria  
 Endogenous variables: IHSG DJIA SSE  
 Exogenous variables: C  
 Date: 03/22/20 Time: 20:04  
 Sample: 1 49  
 Included observations: 43

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-834.6056	NA	1.67e+13	38.95840	39.08127	39.00371
1	-753.6726	146.8087*	5.88e+11*	35.61268*	36.10417*	35.79393*
2	-746.7114	11.65584	6.52e+11	35.70751	36.56763	36.02469
3	-743.4132	5.062366	8.64e+11	35.97271	37.20145	36.42583
4	-739.7216	5.151062	1.14e+12	36.21961	37.81698	36.80867
5	-736.5574	3.973742	1.58e+12	36.49104	38.45703	37.21604
6	-721.9075	16.35331	1.32e+12	36.22826	38.56287	37.08919

\* 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

## ■ UJI STABILITAS VAR

Roots of Characteristic Polynomial  
Endogenous variables: IHSG DJIA SSE  
Exogenous variables: C  
Lag specification: 1 6  
Date: 03/22/20 Time: 20:00

Root	Modulus
0.971975	0.971975
0.896766 - 0.250584i	0.931119
0.896766 + 0.250584i	0.931119
0.700722 - 0.571908i	0.904483
0.700722 + 0.571908i	0.904483
-0.787451 + 0.390825i	0.879104
-0.787451 - 0.390825i	0.879104
0.849641	0.849641
0.454826 - 0.686184i	0.823234
0.454826 + 0.686184i	0.823234
0.001230 - 0.776193i	0.776194
0.001230 + 0.776193i	0.776194
-0.597886 - 0.465782i	0.757905
-0.597886 + 0.465782i	0.757905
-0.285899 - 0.663147i	0.722151
-0.285899 + 0.663147i	0.722151
0.042247 - 0.593792i	0.595293
0.042247 + 0.593792i	0.595293

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

■ **UJI KOINTEGRASI**

Date: 03/22/20 Time: 20:16  
 Sample (adjusted): 3 49  
 Included observations: 47 after adjustments  
 Trend assumption: Linear deterministic trend  
 Series: IHSG DJIA SSE  
 Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.245738	22.18355	29.79707	0.2884
At most 1	0.144968	8.928833	15.49471	0.3720
At most 2	0.032808	1.567860	3.841466	0.2105

Trace test indicates no cointegration at the 0.05 level  
 \* denotes rejection of the hypothesis at the 0.05 level  
 \*\*MacKinnon-Haug-Michelis (1999) p-values

■ **UJI GRANGER (CONTAGION EFFECT)**

Pairwise Granger Causality Tests  
 Date: 04/12/20 Time: 19:40  
 Sample: 1 49  
 Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
DJIA does not Granger Cause IHSG	48	0.04667	0.8299
IHSG does not Granger Cause DJIA		1.51249	0.2252
SSE does not Granger Cause IHSG	48	0.13699	0.7130
IHSG does not Granger Cause SSE		0.60095	0.4423
SSE does not Granger Cause DJIA	48	0.19254	0.6629
DJIA does not Granger Cause SSE		1.22353	0.2745

■ IRF

Response of IHSG:			
Period	IHSG	DJIA	SSE
1	66.60861	0.000000	0.000000
2	70.58647	10.83157	-15.57150
3	54.33915	20.80746	-13.72164
4	52.02903	24.29085	-16.37657
5	43.61353	8.337613	15.24259
6	36.44893	-16.92924	-0.249662
7	19.59077	-26.52384	11.74710
8	20.32662	-31.85832	46.81727
9	14.76696	-34.44295	60.17697
10	7.572058	-44.38612	70.63046
11	-2.326194	-58.54336	66.78533
12	-15.42791	-73.02637	72.72953
13	-20.46044	-83.72270	64.12855
14	-27.30514	-83.96889	59.66696
15	-28.01485	-80.02379	60.37014
16	-27.75789	-71.72205	58.82535
17	-23.96948	-64.32349	61.09311
18	-18.84184	-58.09102	54.75416
19	-15.10561	-52.21487	51.52337
20	-9.493328	-47.25907	44.37055
21	-6.284481	-41.26847	37.90041
22	-2.448230	-36.21476	32.54125
23	-0.169316	-31.08149	27.29816
24	2.091975	-26.97840	26.61192
25	4.433066	-23.81414	25.10586

Response of DJIA:			
Period	IHSG	DJIA	SSE
1	79.74078	241.6156	0.000000
2	52.70166	163.1974	63.58440
3	70.07922	143.0582	87.72901
4	70.38563	82.98878	102.2543
5	12.25213	-0.741724	-7.689318
6	1.165432	11.79678	24.78227
7	-22.89742	-28.63200	12.11329
8	-64.70983	-25.73205	-3.643529
9	-58.74792	-24.78002	10.81762
10	-74.87237	-26.41190	16.82577
11	-59.72144	-13.36842	44.18499
12	-45.15379	-6.790102	16.96691
13	-43.61097	5.270109	20.30711
14	-28.13009	9.729771	-8.455561

15	-31.92243	16.04409	-34.14145
16	-20.87926	23.59461	-51.78475
17	-16.47537	37.83461	-74.29270
18	-6.919521	54.69163	-68.21415
19	8.251186	71.66856	-73.58044
20	15.96774	84.31683	-63.47225
21	27.77990	88.07284	-62.79347
22	29.54352	87.35146	-62.37625
23	31.37601	79.90658	-61.06310
24	27.93564	72.64856	-66.40580
25	22.47992	64.91918	-61.56438

---

Response of  
SSE:

Period	IHSG	DJIA	SSE
1	1.894384	2.314946	41.27549
2	11.34476	3.201537	41.17603
3	2.595580	-3.977581	27.29177
4	-2.389348	-15.83254	22.01219
5	-11.69416	-25.76153	13.26049
6	-16.92841	-30.68368	7.664058
7	-16.58759	-25.44809	0.402106
8	-16.98101	-17.03928	8.778623
9	-11.73026	-9.606598	12.74042
10	-7.798754	-3.852338	14.91183
11	-3.353175	-3.016749	13.78309
12	-1.563287	-2.854235	7.514694
13	-0.439924	-3.302007	3.431445
14	0.339239	-2.551790	-3.589899
15	-0.088069	-0.386408	-6.084010
16	0.822564	1.865043	-7.352239
17	1.458282	4.656423	-5.656089
18	3.304113	6.244920	-2.820383
19	4.503352	7.087439	-1.229905
20	5.199789	6.550943	0.949189
21	5.124576	4.876427	0.648047
22	3.834873	2.746853	0.464456
23	2.462519	0.429586	-0.554187
24	0.601376	-1.121945	-0.874205
25	-0.557583	-2.063984	-0.207851

---

Cholesky  
Ordering:  
IHSG DJIA  
SSE

---

■ FEDV

Variance Decomposition of IHSG:				
Period	S.E.	IHSG	DJIA	SSE
1	66.60861	100.0000	0.000000	0.000000
2	98.88858	96.32072	1.199750	2.479527
3	115.5549	92.65308	4.120993	3.225924
4	130.0699	89.12847	6.740193	4.131337
5	138.2830	88.80296	6.326864	4.870176
6	144.0047	88.29273	7.216121	4.491150
7	148.1981	85.11434	10.01676	4.868900
8	159.9458	74.68559	12.56672	12.74769
9	174.9523	63.13522	14.37916	22.48562
10	193.9702	51.51428	16.93407	31.55165
11	213.3482	42.59327	21.52729	35.87945
12	237.4403	34.81042	26.83946	38.35012
13	260.6118	29.51187	32.59939	37.88874
14	281.5581	26.22465	36.82345	36.95190
15	300.1802	23.94280	39.50318	36.55402
16	315.4095	22.46101	40.95130	36.58769
17	328.5233	21.23596	41.58081	37.18323
18	338.6077	20.29954	42.08421	37.61625
19	346.7916	19.54248	42.38837	38.06915
20	352.9259	18.94139	42.72074	38.33787
21	357.4013	18.50091	42.99082	38.50827
22	360.7106	18.16760	43.21359	38.61880
23	363.0749	17.93178	43.38546	38.68276
24	365.0532	17.74125	43.46268	38.79608
25	366.7164	17.59530	43.49104	38.91366

Variance Decomposition of DJIA:				
Period	S.E.	IHSG	DJIA	SSE
1	254.4341	9.822238	90.17776	0.000000
2	313.3537	9.304419	86.57810	4.117480
3	362.3033	10.70148	80.35518	8.943339
4	391.8684	12.37379	73.17247	14.45374
5	392.1360	12.45453	73.07300	14.47247
6	393.0971	12.39458	72.80618	14.79924
7	394.9888	12.61219	72.63593	14.75188
8	401.0972	14.83378	70.85199	14.31423
9	406.2774	16.54884	69.42873	14.02243
10	414.3041	19.17973	67.17098	13.64929
11	421.1242	20.57467	65.11371	14.31162
12	423.9321	21.43749	64.27966	14.28285

13	426.6855	22.20638	63.46801	14.32561
14	427.8060	22.52257	63.18770	14.28973
15	430.6507	22.77546	62.49445	14.73008
16	434.8958	22.56350	61.57472	15.86178
17	443.1215	21.87182	60.03892	18.08927
18	451.7177	21.07076	59.24148	19.68776
19	463.3222	20.06021	58.70381	21.23598
20	475.4581	19.16200	58.89013	21.94787
21	488.3974	18.48365	59.06298	22.45337
22	500.9251	17.91853	59.18655	22.89492
23	511.8829	17.53529	59.11649	23.34822
24	522.0077	17.14806	58.78236	24.06958
25	530.0963	16.80857	58.50197	24.68945

Variance  
Decomposition  
of SSE:

Period	S.E.	IHSG	DJIA	SSE
1	41.38373	0.209545	0.312912	99.47754
2	59.55697	3.729659	0.440053	95.83029
3	65.68433	3.222423	0.728484	96.04909
4	71.10096	2.863072	5.580217	91.55671
5	77.66336	4.666950	15.68002	79.65303
6	85.54761	7.762123	25.78768	66.45020
7	90.78166	10.23152	30.75784	59.01064
8	94.32426	12.71842	31.75414	55.52745
9	96.38086	13.66270	31.40692	54.93039
10	97.91472	13.87238	30.58542	55.54221
11	98.98289	13.68935	30.02175	56.28890
12	99.32106	13.62106	29.90024	56.47870
13	99.43613	13.59151	29.94135	56.46714
14	99.53421	13.56590	29.94810	56.48600
15	99.72076	13.51527	29.83765	56.64708
16	100.0122	13.44338	29.69879	56.85784
17	100.2908	13.38994	29.74959	56.86047
18	100.5789	13.42126	29.96492	56.61382
19	100.9363	13.52544	30.24613	56.22844
20	101.2867	13.69558	30.45555	55.84888
21	101.5355	13.88327	30.53713	55.57959
22	101.6460	13.99542	30.54376	55.46082
23	101.6783	14.04520	30.52618	55.42862
24	101.6900	14.04546	30.53131	55.42323
25	101.7127	14.04220	30.55887	55.39893

Cholesky  
Ordering: IHSG  
DJIA SSE