

H1 INTERRUPTED TIME SERIES MODEL
NY 2010-2016 ED Data

The AUTOREG Procedure

Dependent Variable	TCC
	Trend-Cycle Component

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The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	101486.894	DFE	68
MSE	1492	Root MSE	38.63230
SBC	743.507169	AIC	734.400504
MAE	31.3057145	AICC	734.997519
MAPE	1.69763005	HQC	738.025895
Durbin-Watson	0.1535	Total R-Square	0.9478

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	1506	11.2757	133.54	<.0001
PRESLOPE	1	7.2151	0.2677	26.96	<.0001
INTERVENTION	1	106.9685	29.6685	3.61	0.0006
POSTSLOPE	1	-4.0979	4.9874	-0.82	0.4141

Estimates of Autocorrelations													
Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0
0	1409.5	1.000000											
1	1295.4	0.919051											
2	1146.6	0.813486											
3	1003.7	0.712052											
4	864.1	0.613056											
5	702.7	0.498503											
6	496.5	0.352245											
7	295.9	0.209936											

Preliminary MSE	198.1
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Estimates of Autoregressive Parameters			
Lag	Coefficient	Standard Error	t Value
1	-0.964812	0.049309	-19.57
7	0.129914	0.049309	2.63

Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.9211
2	0.8273
3	0.7201
4	0.6012
5	0.4726
6	0.3363

Expected Autocorrelations	
Lag	Autocorr
7	0.1945

Coefficients for First NLAG Observations							
	1	2	3	4	5	6	7
1	0.3695403223	0	0	0	0	0	0
2	-0.874444323	0.9493223494	0	0	0	0	0
3	0.1338307104	-1.006365685	0.9587093314	0	0	0	0
4	0.128635691	-1.20113E-15	-0.997427307	0.9673007407	0	0	0
5	0.1258009293	9.723699E-16	-3.3758E-16	-0.989097615	0.9754468703	0	0
6	0.125080543	-1.59764E-15	6.074706E-16	2.46195E-16	-0.981064839	0.9834336475	0
7	0.1264141874	1.660886E-16	-1.19393E-15	7.516501E-16	-8.63236E-17	-0.973058619	0.9915252321

Algorithm converged.

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Maximum Likelihood Estimates			
SSE	7089.05994	DFE	66
MSE	107.41000	Root MSE	10.36388
SBC	563.120457	AIC	549.46046
MAE	7.06473794	AICC	550.752768
MAPE	0.37344081	HQC	554.898545
Log Likelihood	-268.73023	Transformed Regression R-Square	0.6640
Durbin-Watson	0.6859	Total R-Square	0.9964
		Observations	72

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	1497	38.5715	38.82	<.0001
PRESLOPE	1	7.7246	1.0275	7.52	<.0001
INTERVENTION	1	18.9064	11.1116	1.70	0.0936
POSTSLOPE	1	2.8064	5.9480	0.47	0.6386
AR1	1	-1.0105	0.0360	-28.08	<.0001
AR7	1	0.0794	0.0495	1.60	0.1137

Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.9577
2	0.9096
3	0.8559
4	0.7969
5	0.7330
6	0.6647
7	0.5923

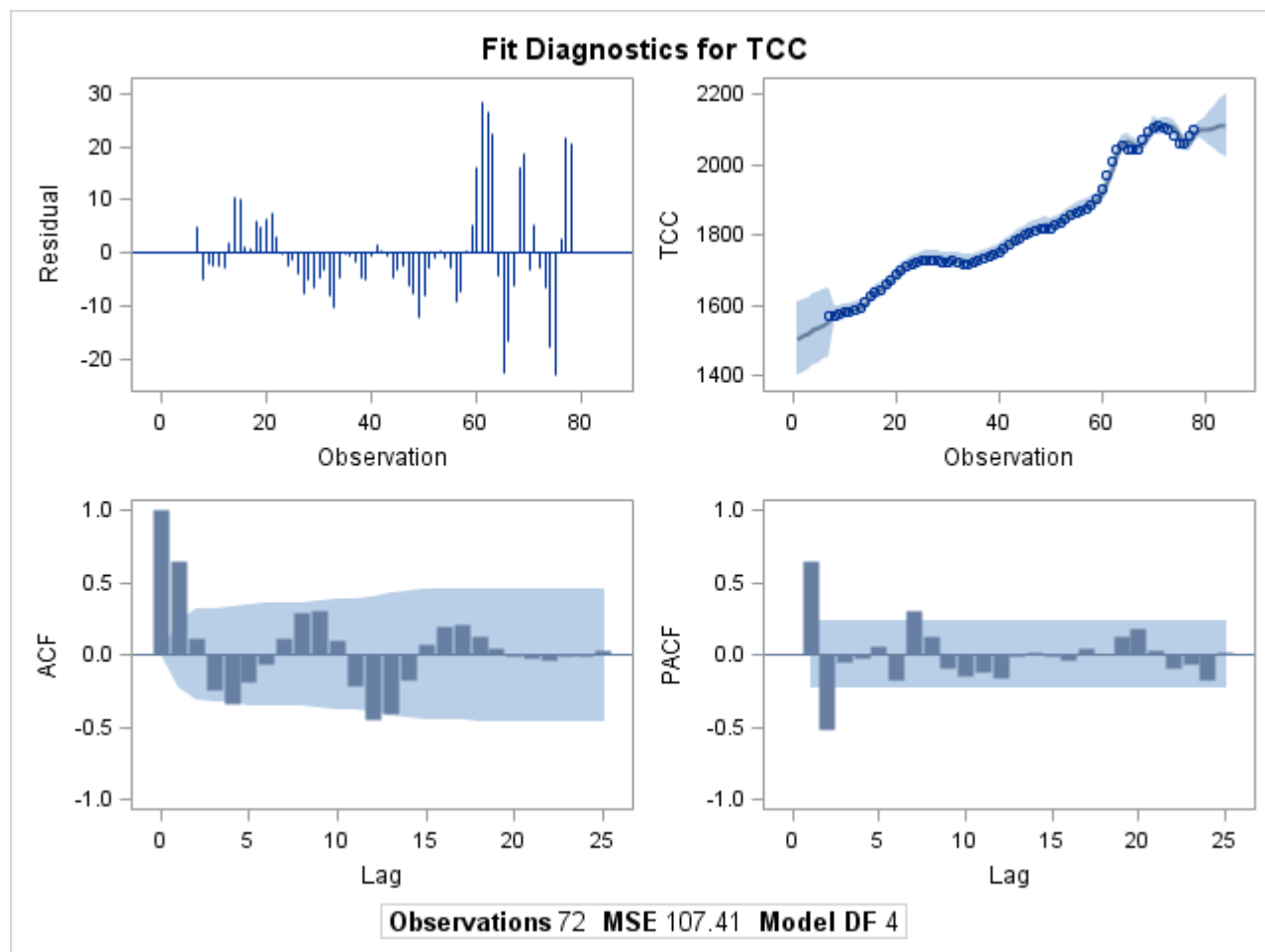
Coefficients for First NLAG Observations							
	1	2	3	4	5	6	7
1	0.2815310747	0	0	0	0	0	0
2	-0.937158102	0.9785320916	0	0	0	0	0
3	0.0908710841	-1.028219285	0.9827423915	0	0	0	0
4	0.0871931456	-7.90491E-17	-1.02419595	0.986602885	0	0	0
5	0.0842987657	-3.27054E-16	-8.05503E-16	-1.020477682	0.990197725	0	0
6	0.0820779514	6.010732E-16	5.300827E-16	-7.45138E-16	-1.01698988	0.9935936417	0
7	0.0804521608	-1.67612E-15	4.846845E-16	3.591179E-16	-6.63708E-16	-1.013672347	0.9968454619

Autoregressive parameters assumed given

Autoregressive parameter estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	1497	34.3117	43.64	<.0001
PRESLOPE	1	7.7246	0.7808	9.89	<.0001
INTERVENTION	1	18.9064	11.0769	1.71	0.0926
POSTSLOPE	1	2.8064	4.2576	0.66	0.5121

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H2 INTERRUPTED TIME SERIES MODEL
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Dependent Variable	TCC
	Trend-Cycle Component

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NY 2010-2016 ED Data

The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	3915.07527	DFE	68
MSE	57.57464	Root MSE	7.58780
SBC	509.140321	AIC	500.033656
MAE	5.33464723	AICC	500.630671
MAPE	3.47032473	HQC	503.659046
Durbin-Watson	0.5137	Total R-Square	0.9590

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	116.8563	2.2147	52.76	<.0001
PRESLOPE	1	0.6710	0.0526	12.76	<.0001
INTERVENTION	1	43.1512	5.8272	7.41	<.0001
POSTSLOPE	1	7.2375	0.9796	7.39	<.0001

Estimates of Autocorrelations																							
Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1
0	54.3760	1.000000													*****								
1	40.0489	0.736518													*****								

Preliminary MSE	24.8793
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Estimates of Autoregressive Parameters			
Lag	Coefficient	Standard Error	t Value
1	-0.736518	0.082638	-8.91

Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.7365

Coefficients for First NLAG Observations	
	1
1	0.6764178697

Algorithm converged.

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Maximum Likelihood Estimates			
SSE	365.017128	DFE	67
MSE	5.44802	Root MSE	2.33410
SBC	346.105223	AIC	334.721892
MAE	1.57043783	AICC	335.630983
MAPE	0.97928081	HQC	339.25363
Log Likelihood	-162.36095	Transformed Regression R-Square	0.6770
Durbin-Watson	0.5537	Total R-Square	0.9962
		Observations	72

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	112.4116	17.6469	6.37	<.0001
PRESLOPE	1	1.1446	0.4816	2.38	0.0203
INTERVENTION	1	2.8244	2.4983	1.13	0.2623
POSTSLOPE	1	7.2872	1.0400	7.01	<.0001
AR1	1	-0.9851	0.0333	-29.60	<.0001

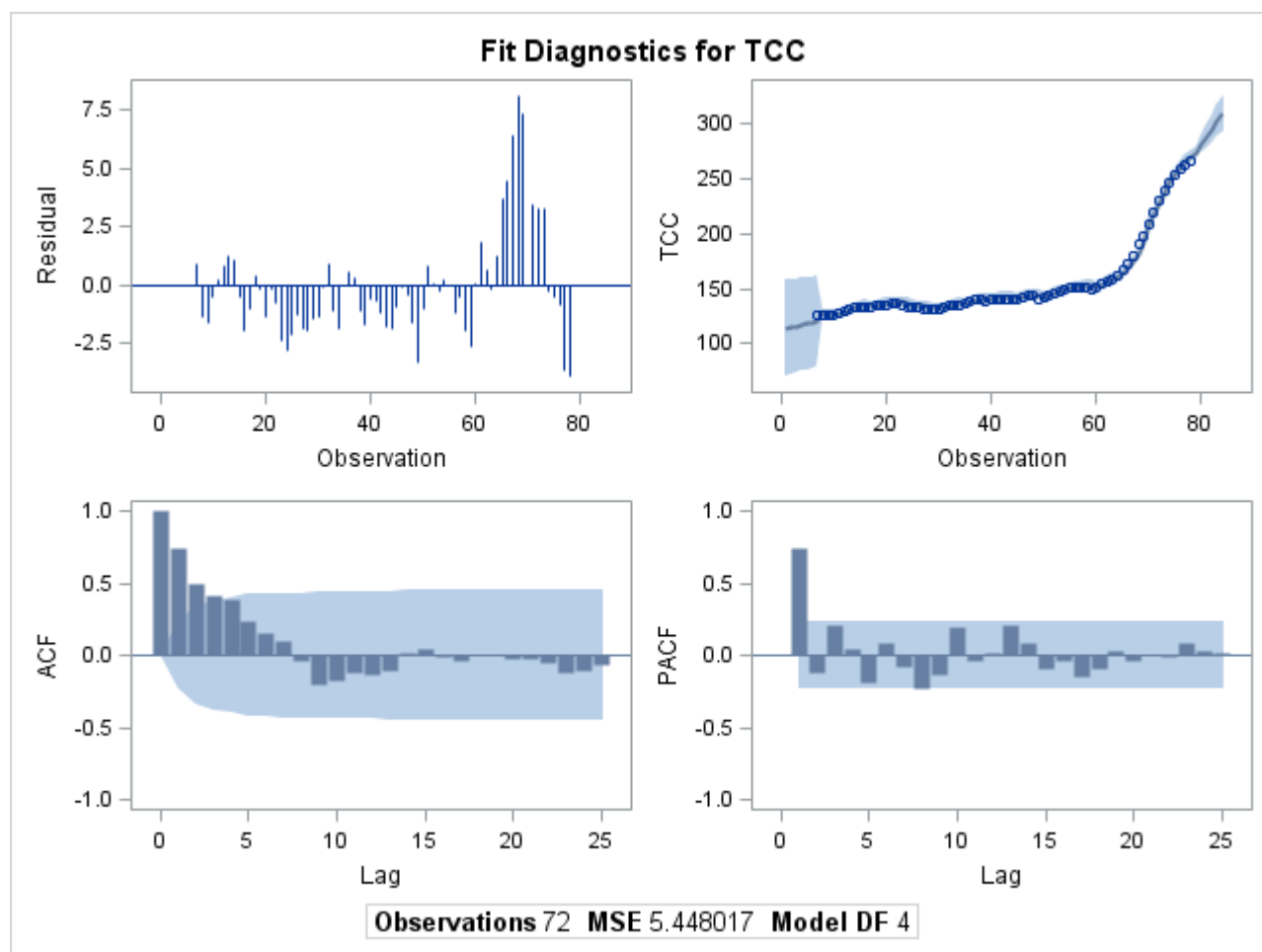
Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.9851

Coefficients for First NLAG Observations	
	1
1	0.1721553556

Autoregressive parameters assumed given					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	112.4116	14.4591	7.77	<.0001
PRESLOPE	1	1.1446	0.2408	4.75	<.0001
INTERVENTION	1	2.8244	2.4936	1.13	0.2614
POSTSLOPE	1	7.2872	0.8067	9.03	<.0001

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H3 INTERRUPTED TIME SERIES MODEL
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Dependent Variable	TCC
	Trend-Cycle Component

H3 INTERRUPTED TIME SERIES MODEL
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The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	37988.8511	DFE	68
MSE	558.65957	Root MSE	23.63598
SBC	672.757309	AIC	663.650644
MAE	18.4584289	AICC	664.247659
MAPE	16.72206	HQC	667.276035
Durbin-Watson	0.2434	Total R-Square	0.9703

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	-26.8744	6.8987	-3.90	0.0002
PRESLOPE	1	4.7418	0.1638	28.96	<.0001
INTERVENTION	1	94.6056	18.1518	5.21	<.0001
POSTSLOPE	1	13.8194	3.0514	4.53	<.0001

Estimates of Autocorrelations																							
Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1
0	527.6	1.000000													*****								
1	449.7	0.852337													*****								

Preliminary MSE	144.3
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Estimates of Autoregressive Parameters			
Lag	Coefficient	Standard Error	t Value
1	-0.852337	0.063894	-13.34

Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.8523

Coefficients for First NLAG Observations	
	1
1	0.5229922251

ERROR: The estimation did not converge in the maximum iterations. Continuing assuming convergence.

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The AUTOREG Procedure

Maximum Likelihood Estimates			
SSE	1695.53346	DFE	67
MSE	25.30647	Root MSE	5.03055
SBC	457.146328	AIC	445.762997
MAE	3.57488974	AICC	446.672088
MAPE	2.84070816	HQC	450.294735
Log Likelihood	-217.8815	Transformed Regression R-Square	0.7423
Durbin-Watson	0.6424	Total R-Square	0.9987
		Observations	72

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	-0.7202	49.1815	-0.01	0.9884
PRESLOPE	1	5.3427	1.3872	3.85	0.0003
INTERVENTION	1	7.7622	5.3607	1.45	0.1523
POSTSLOPE	1	14.0044	2.0323	6.89	<.0001
AR1	1	-0.9906	0.0282	-35.11	<.0001

Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.9906

Coefficients for First NLAG Observations	
	1
1	0.1365850817

Autoregressive parameters assumed given					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	-0.7202	38.7382	-0.02	0.9852
PRESLOPE	1	5.3427	0.5586	9.56	<.0001
INTERVENTION	1	7.7622	5.3602	1.45	0.1523
POSTSLOPE	1	14.0044	1.7537	7.99	<.0001

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