The MODEL Procedure

Model Summary	
Model Variables	1
Parameters	3
Equations	1
Number of Statements	2
Program Lag Length	1

Model Variables	Robor_3m
Parameters	a b sigma
Equations	Robor_3m

The Equation to Estimate is	
Robor_3m =	F(a, b(a))
VAR(Robor_3m) =	H(sigma)

The estimation lag length	1

NOTE: At FIML Iteration 10 CONVERGE=0.001 Criteria Met.

The MODEL Procedure
FIML Estimation Summary

Data Set Options	
DATA=	DATE
OUT=	PREDICT

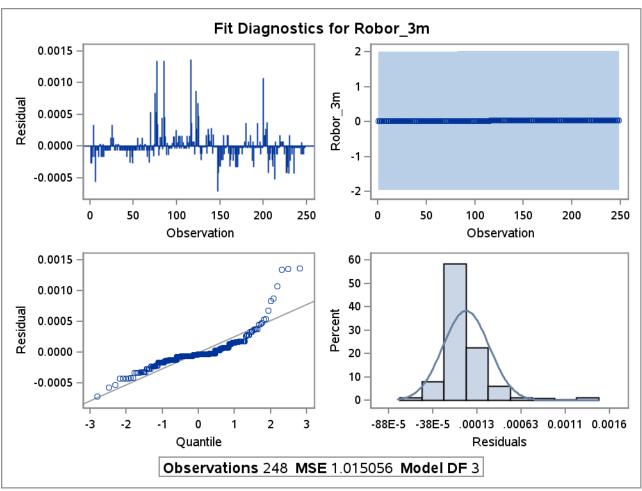| Minimization Summary	
Parameters Estimated	3
Method	Gauss
Hessian	Cross
Covariance Estimator	Cross
Iterations	10

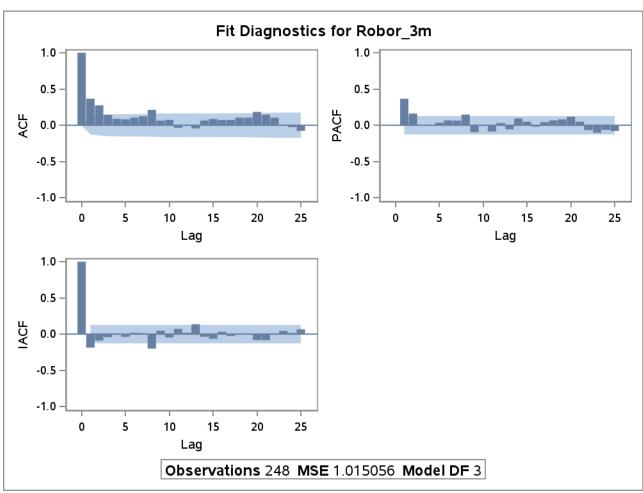| Final Convergence Criteria	
R	0.000743
PPC(sigma)	0.001346
RPC(sigma)	0.010898
Object	0.000022
Trace(S)	6.737E-8
Gradient norm	1.767648
Log likelihood	1695.372

Observations Processed	
Read	249
Solved	248
First	2
Last	249
Lagged	1

The MODEL Procedure

Nonlinear FIML Summary of Residual Errors							
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
Robor_3m	3	245	0.000017	6.82E-8	0.000261	0.9976	0.9976
RESID.Robor_3m		245	248.7	1.0151	1.0075		

Nonlinear FIML Parameter Estimates					
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > |t|	Label
a	0.003433	0.00293	1.17	0.2428	Speed of Mean Reversion
b	0.039236	0.0118	3.34	0.0010	Long term Mean
sigma	0.001571	0.000070	22.32	<.0001	Constant part of variance

Number of Observations		Statistics for System	
Used	248	**Log Likelihood**	1695
Missing	0		

The MODEL Procedure

Fit Diagnostics for Robor_3m

Observations 248   MSE 1.015056   Model DF 3

Fit Diagnostics for Robor_3m

Observations 248   MSE 1.015056   Model DF 3

The MODEL Procedure

Model Summary	
Model Variables	1
Endogenous	1
Parameters	3
Range Variable	year
Equations	1
Number of Statements	3
Program Lag Length	1

Model Variables	Robor_3m
Parameters(Value(t Value))	a(0.0034328235(1.1708388609)) b(0.0392355211(3.3359674236)) sigma(0.001571117(22.317015738))
Equations	Robor_3m

The MODEL Procedure
Dynamic Single-Equation 1-Periods-Ahead Forecasting Simulation

Data Set Options	
DATA=	DATE
OUT=	FORECAST

Solution Summary	
Variables Solved	1
Simulation Lag Length	1
Nonzero Derivatives	1
Solution Range	year
First	2019
Last	2019
Solution Method	NEWTON
CONVERGE=	1E-8
Maximum CC	0
Maximum Iterations	1
Total Iterations	48
Average Iterations	1

Observations Processed	
Read	96
Lagged	48
Solved	48
First	250
Last	297

Variables Solved For	Robor_3m