



The AUTOREG Procedure

Dependent Variable	RATE
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The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	4.58538172	DFE	21
MSE	0.21835	Root MSE	0.46728
SBC	34.4518812	AIC	32.1808928
MAE	0.3437326	AICC	32.7808928
MAPE	6.25762815	HQC	32.75204
Durbin-Watson	1.0603	Total R-Square	0.9072

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr >  t
Intercept	1	8.3109	0.2014	41.27	<.0001
time	1	-0.2104	0.0147	-14.32	<.0001

Estimates of Autocorrelations						
Lag	Covariance	Correlation	-1.0	-0.5	0.0	0.5 1.0
0	0.1994	1.0000				
1	0.0872	0.4374				

Preliminary MSE	0.1612
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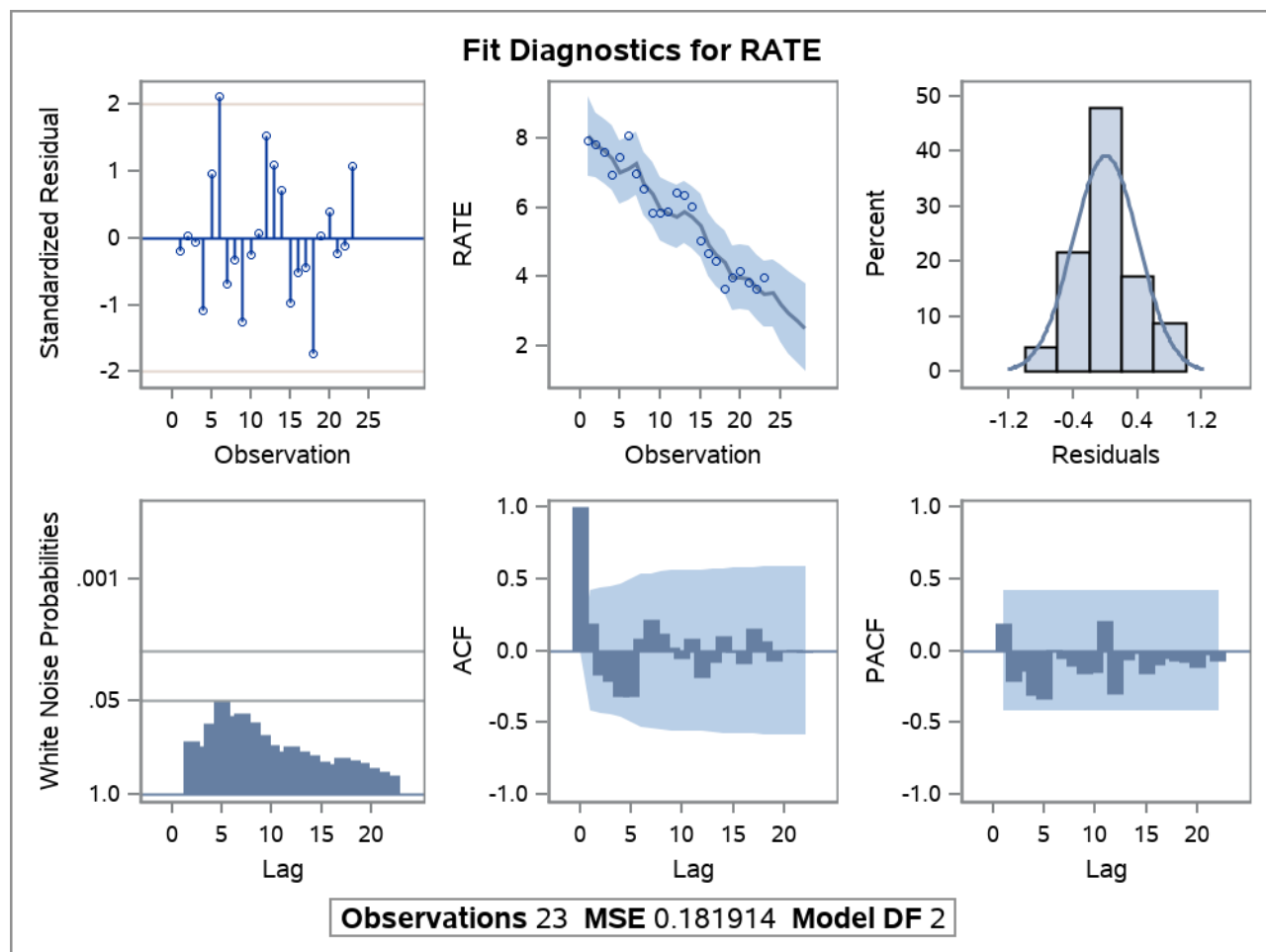
Estimates of Autoregressive Parameters			
Lag	Coefficient	Standard Error	t Value
1	-0.437370	0.201085	-2.18

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Yule-Walker Estimates			
<b>SSE</b>	3.63827923	<b>DFE</b>	20
<b>MSE</b>	0.18191	<b>Root MSE</b>	0.42651
<b>SBC</b>	32.4783553	<b>AIC</b>	29.0718727
<b>MAE</b>	0.30607633	<b>AICC</b>	30.3350306
<b>MAPE</b>	5.54023092	<b>HQC</b>	29.9285935
<b>Durbin-Watson</b>	1.5436	<b>Transformed Regression R-Square</b>	0.8179
		<b>Total R-Square</b>	0.9263

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr >  t
<b>Intercept</b>	1	8.2552	0.3011	27.42	<.0001
<b>time</b>	1	-0.2048	0.0216	-9.48	<.0001

The AUTOREG Procedure



**Data from Exercise 10.26/7th and 8th editions  
Forecasting**

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Obs	yhat	lcl	ucl	ytrend	YEAR	RATE	time
23	3.50066	2.54515	4.45618	3.54381	2017	3.99	23
24	3.53412	2.57037	4.49786	3.33897	.	.	24
25	3.21948	2.10108	4.33788	3.13412	.	.	25
26	2.96661	1.78124	4.15197	2.92928	.	.	26
27	2.74076	1.51397	3.96755	2.72443	.	.	27
28	2.52673	1.26738	3.78608	2.51959	.	.	28

**Notice that the forecasts take into account the recent departures from the trend  
but converge back to the trend line for longer forecast horizons**

