The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption
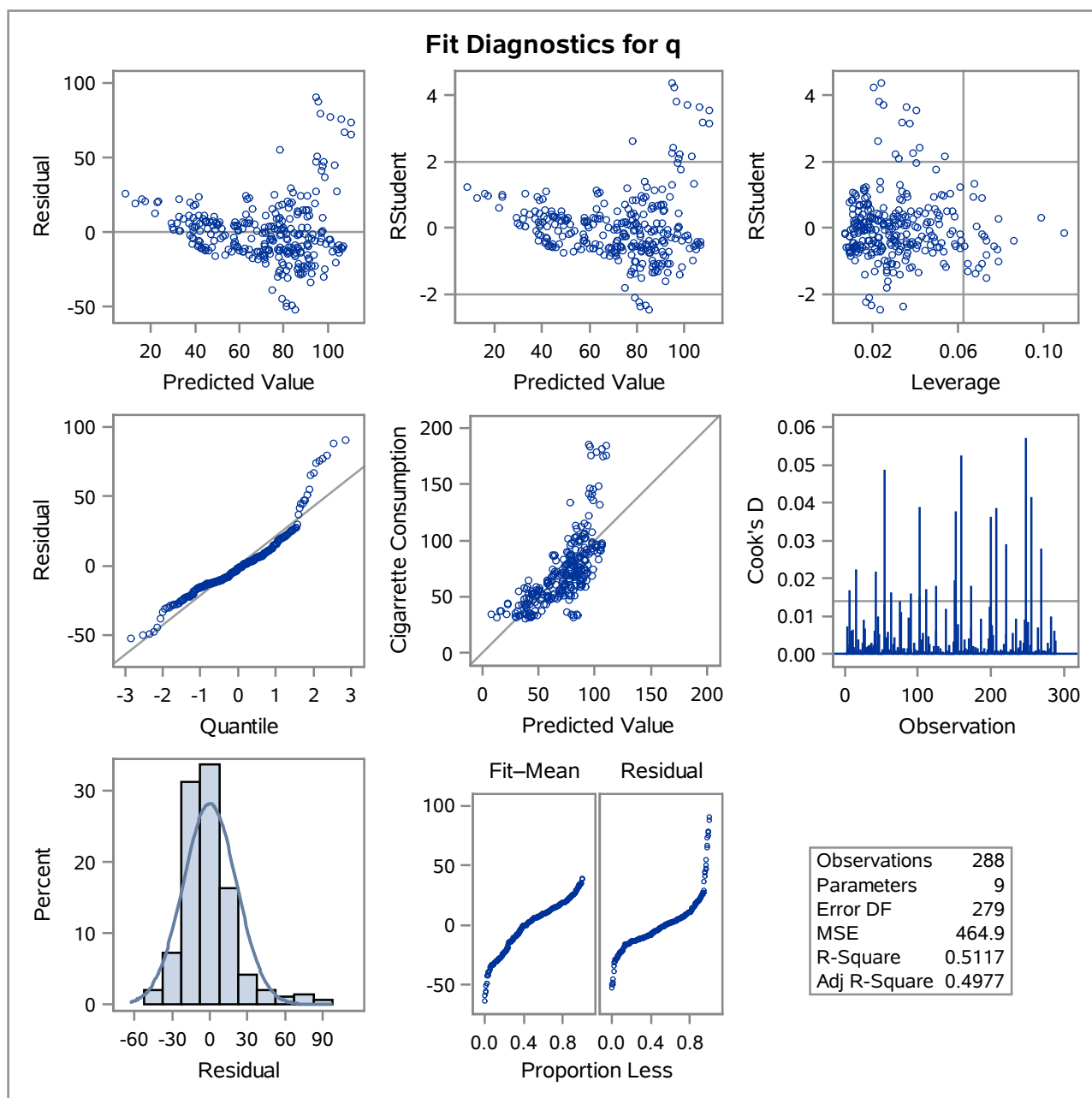
Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	135920	16990	36.55	<.0001
Error	279	129706	464.89774		
Corrected Total	287	265627			

Root MSE	21.56149	R-Square	0.5117
Dependent Mean	71.76944	Adj R-Sq	0.4977
Coeff Var	30.04271		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	56.50281	27.84846	2.03	0.0434
p1	Price Per Pack of Cigarrettes	1	-0.56814	0.10323	-5.50	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00136	0.00080957	-1.68	0.0944
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.48934	0.07984	6.13	<.0001
taxrt1	Real State Tax Rate on Cigarrettes	1	-0.02333	0.11681	-0.20	0.8418
ftaxrt1	Real Federal Tax Rate on Cigarrettes	1	3.31981	1.44620	2.30	0.0224
canada		1	-1.04034	3.52378	-0.30	0.7680
mexico	State Border with Mexico	1	-34.44669	4.79771	-7.18	<.0001
producer	Tobacco Producing State	1	11.60314	4.31849	2.69	0.0076

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Fit Diagnostics for q

Observations		288
Parameters		9
Error DF		279
MSE		464.9
R-Square		0.5117
Adj R-Square		0.4977

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
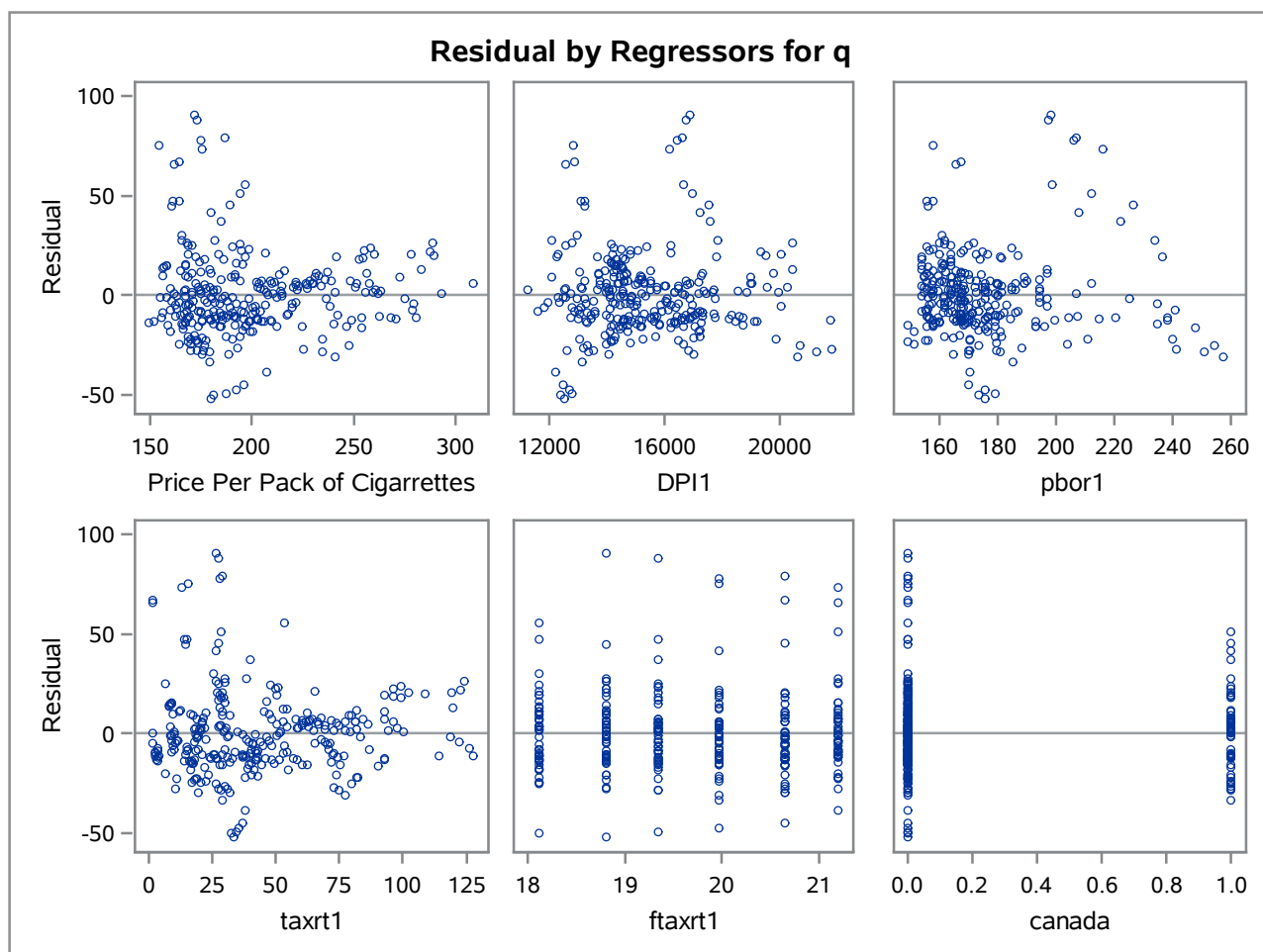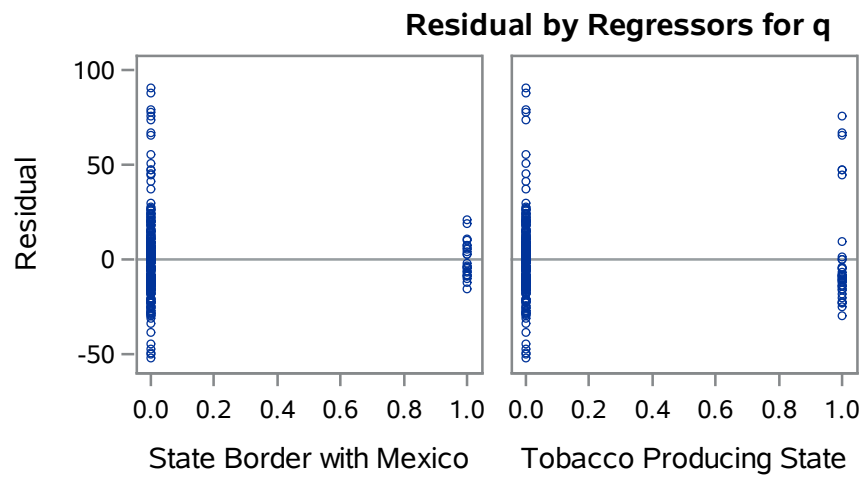
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	132564	18938	39.85	<.0001
Error	280	133063	475.22372		
Corrected Total	287	265627			

Root MSE	21.79963	R-Square	0.4991
Dependent Mean	71.76944	Adj R-Sq	0.4865
Coeff Var	30.37452		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	67.68986	27.83957	2.43	0.0157
p1	Price Per Pack of Cigarrettes	1	-0.54857	0.10411	-5.27	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00138	0.00081847	-1.69	0.0930
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.47128	0.08044	5.86	<.0001
taxrt1	Real State Tax Rate on Cigarrettes	1	-0.09016	0.11539	-0.78	0.4353
ftaxrt1	Real Federal Tax Rate on Cigarrettes	1	2.96577	1.45610	2.04	0.0426
canada		1	-1.83525	3.55012	-0.52	0.6056
mexico	State Border with Mexico	1	-35.79276	4.82418	-7.42	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption
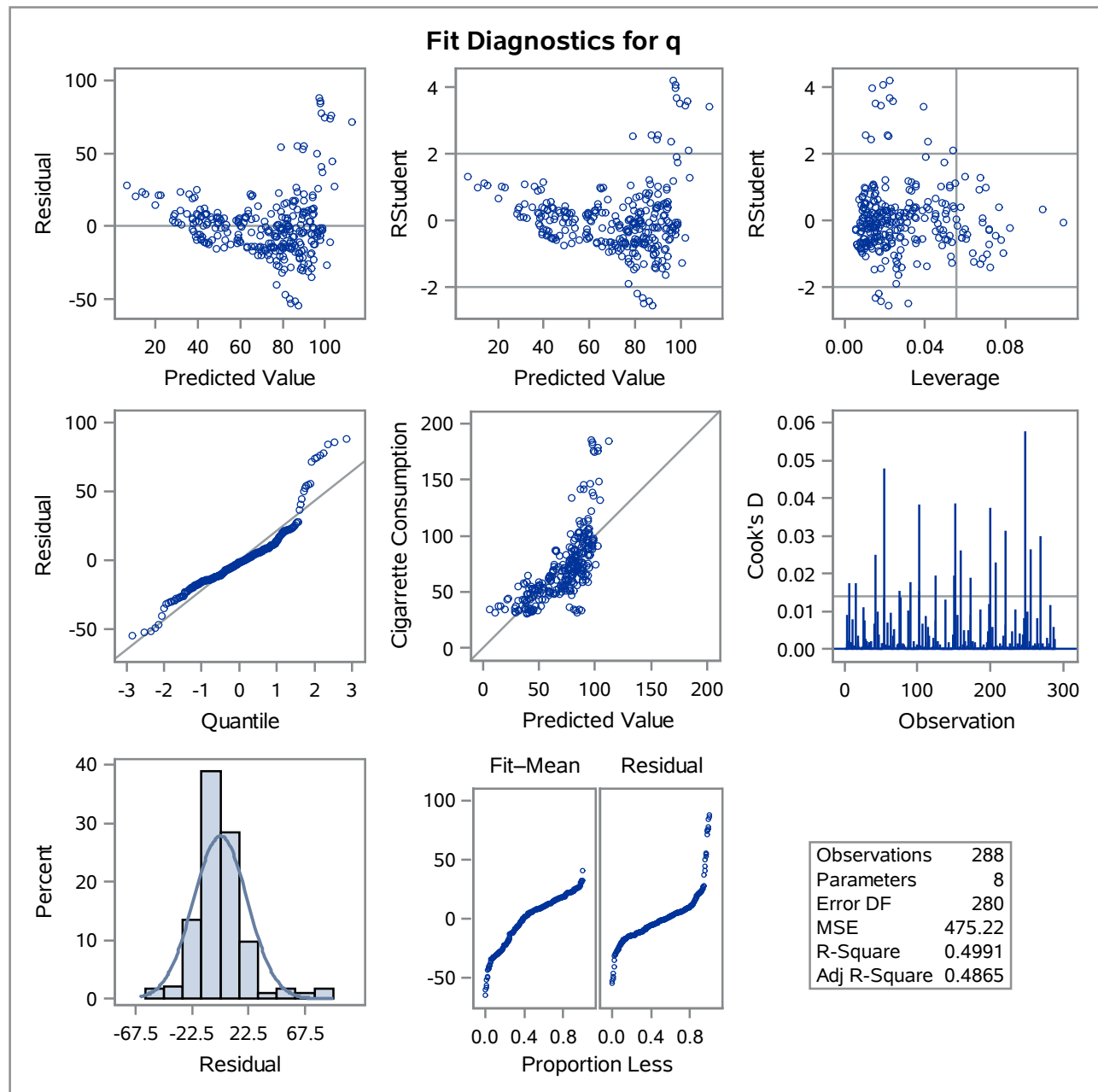
Fit Diagnostics for q

Observations	288
Parameters	8
Error DF	280
MSE	475.22
R-Square	0.4991
Adj R-Square	0.4865

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
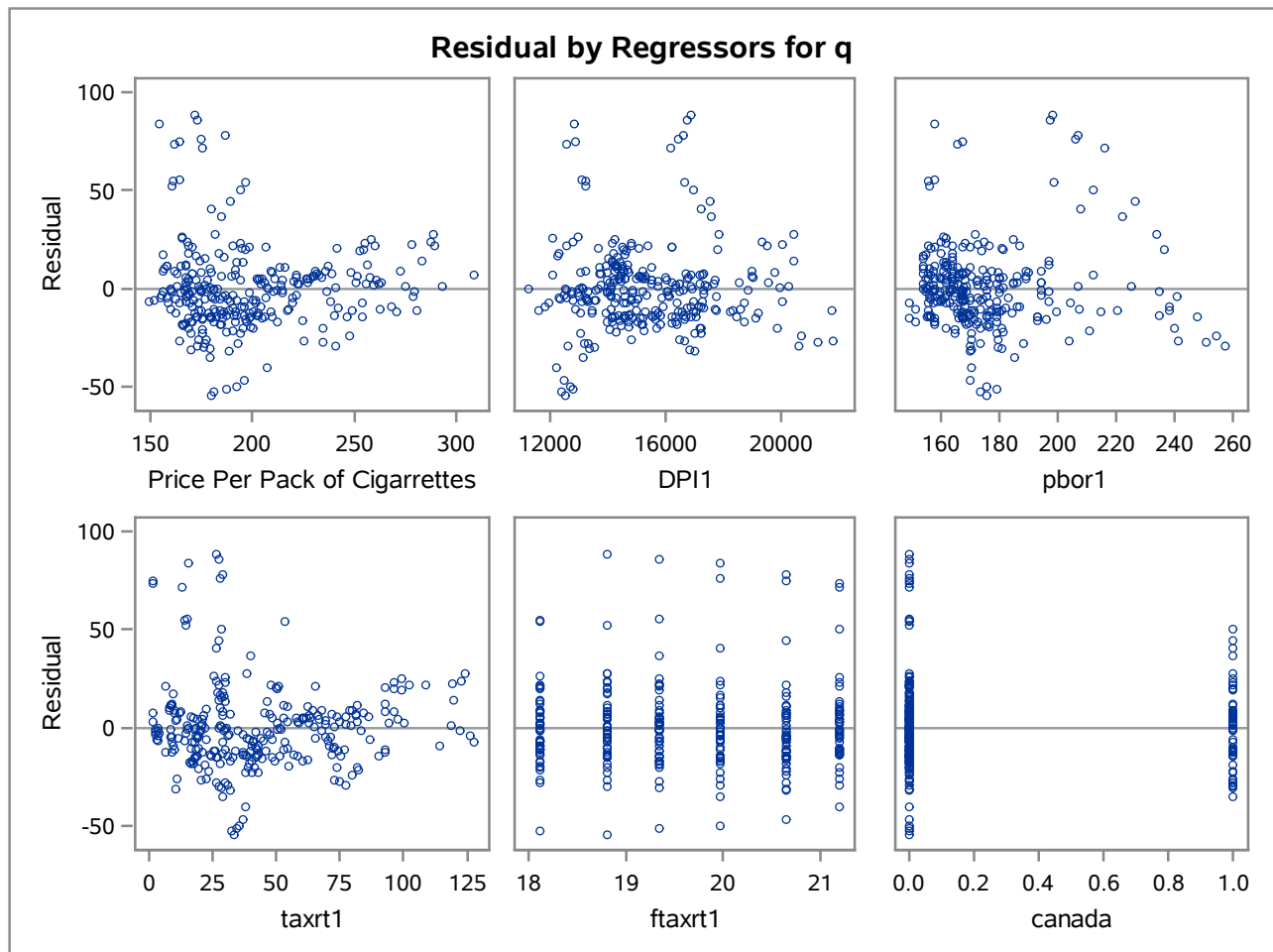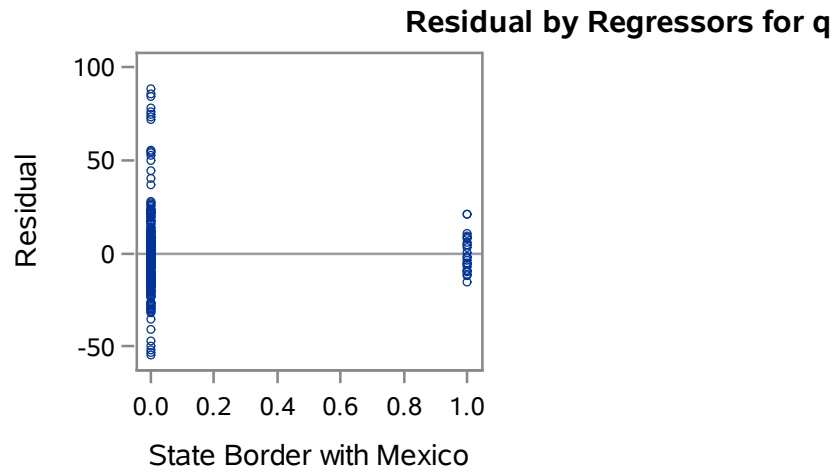
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	111334	18556	33.79	<.0001
Error	281	154293	549.08475		
Corrected Total	287	265627			

Root MSE	23.43256	R-Square	0.4191
Dependent Mean	71.76944	Adj R-Sq	0.4067
Coeff Var	32.64977		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	44.46236	30.21155	1.47	0.1422
p1	Price Per Pack of Cigarrettes	1	-0.48391	0.10974	-4.41	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00073195	0.00085069	-0.86	0.3903
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.45746	0.08482	5.39	<.0001
taxrt1	Real State Tax Rate on Cigarrettes	1	-0.13053	0.12582	-1.04	0.3004
ftaxrt1	Real Federal Tax Rate on Cigarrettes	1	2.93899	1.56480	1.88	0.0614
producer	Tobacco Producing State	1	14.51904	4.65777	3.12	0.0020

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption
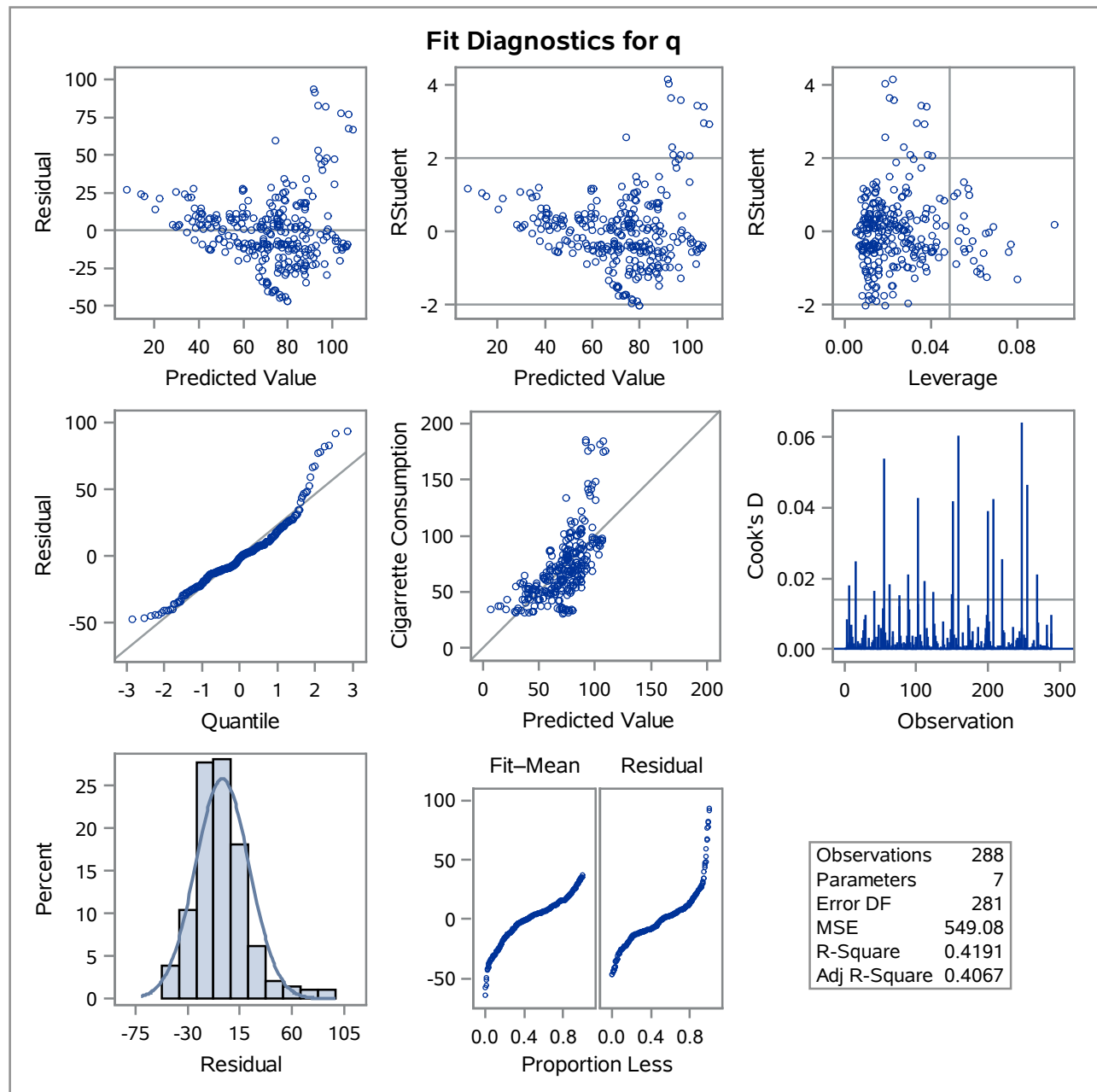
Fit Diagnostics for q

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
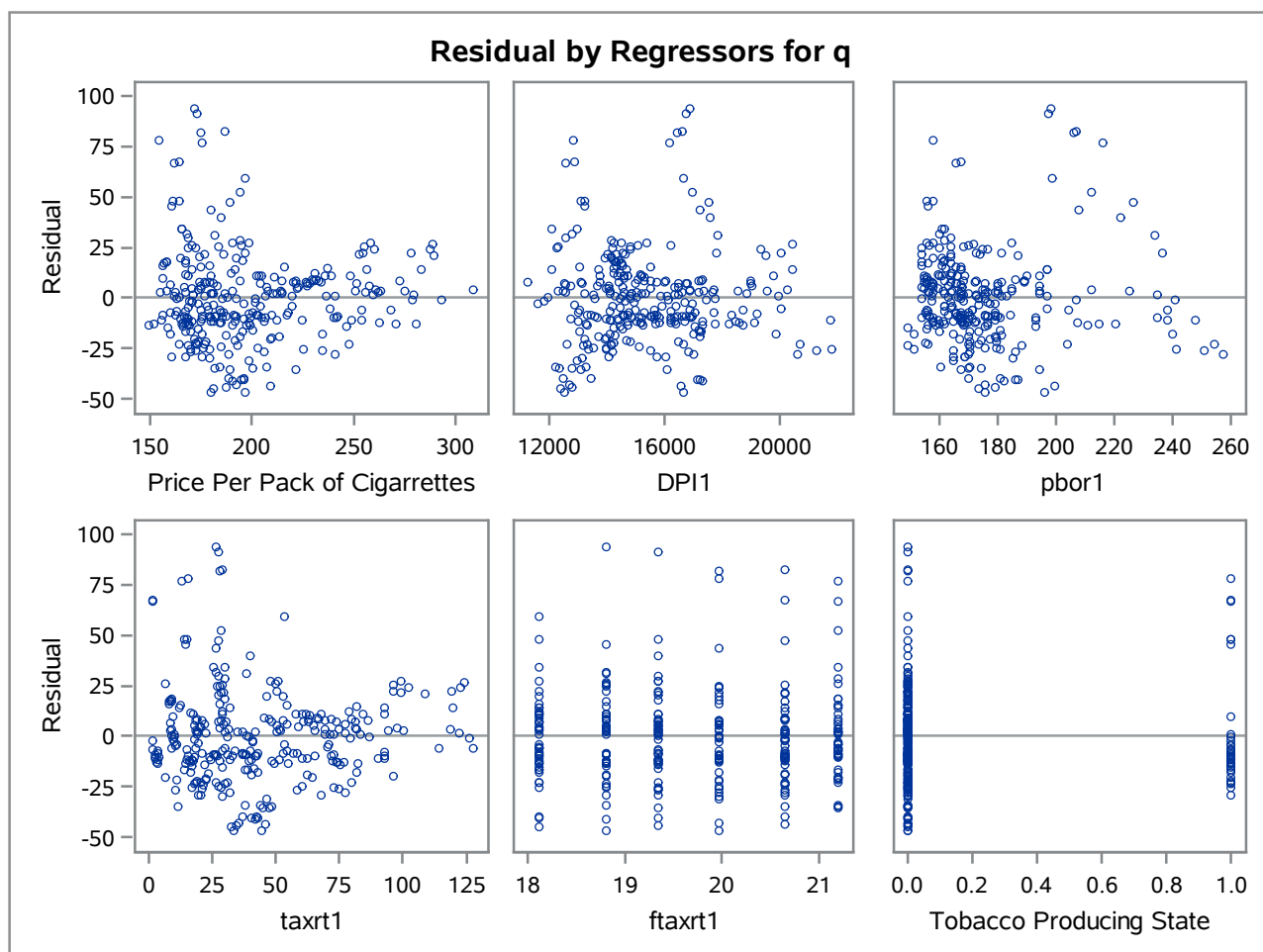
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	105999	21200	37.45	<.0001
Error	282	159628	566.05719		
Corrected Total	287	265627			

Root MSE	23.79196	R-Square	0.3991
Dependent Mean	71.76944	Adj R-Sq	0.3884
Coeff Var	33.15054		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	58.15873	30.34878	1.92	0.0563
p1	Price Per Pack of Cigarrettes	1	-0.46031	0.11116	-4.14	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00067982	0.00086357	-0.79	0.4318
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.42866	0.08560	5.01	<.0001
taxrt1	Real State Tax Rate on Cigarrettes	1	-0.21877	0.12447	-1.76	0.0799
ftaxrt1	Real Federal Tax Rate on Cigarrettes	1	2.50682	1.58255	1.58	0.1143

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption
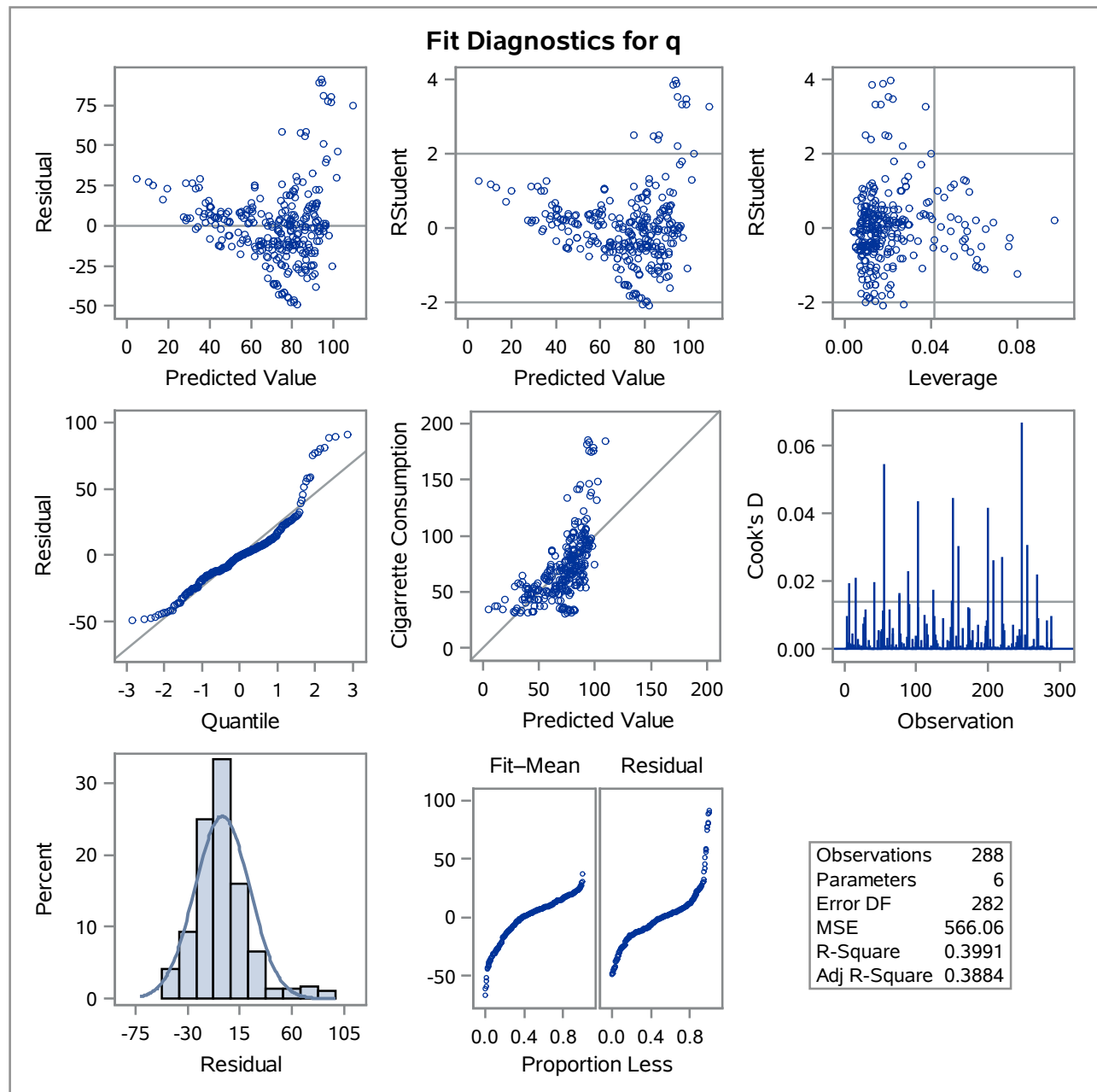
Fit Diagnostics for q

Observations	288
Parameters	6
Error DF	282
MSE	566.06
R-Square	0.3991
Adj R-Square	0.3884

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
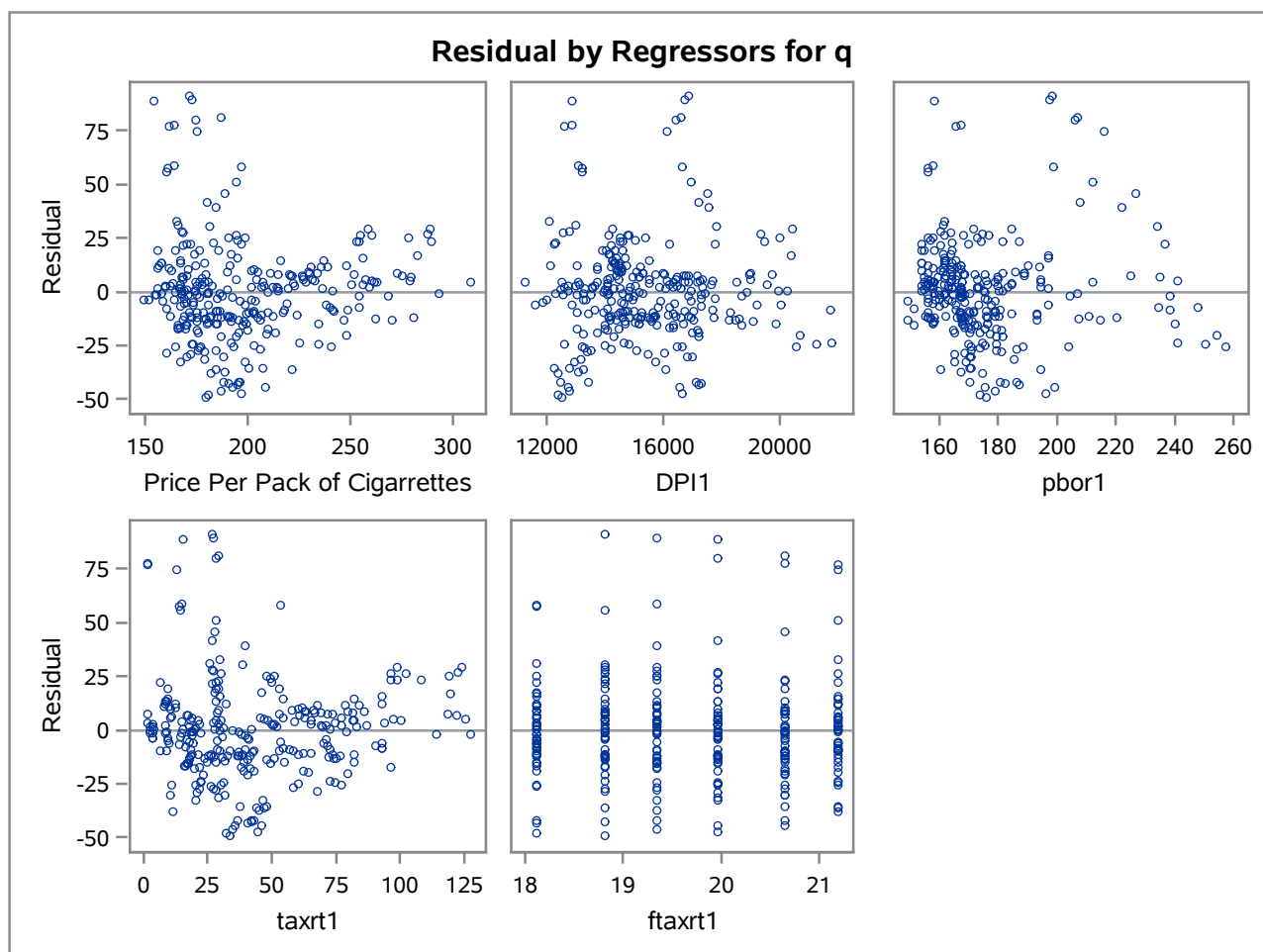
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	104578	26145	45.94	<.0001
Error	283	161048	569.07586		
Corrected Total	287	265627			

Root MSE	23.85531	R-Square	0.3937
Dependent Mean	71.76944	Adj R-Sq	0.3851
Coeff Var	33.23881		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	96.69209	18.19478	5.31	<.0001
p1	Price Per Pack of Cigarrettes	1	-0.38023	0.09926	-3.83	0.0002
DPI1	Real Disposable Income (Per Capita)	1	-0.00102	0.00083791	-1.22	0.2224
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.45379	0.08434	5.38	<.0001
taxrt1	Real State Tax Rate on Cigarrettes	1	-0.31526	0.10884	-2.90	0.0041

**The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption**
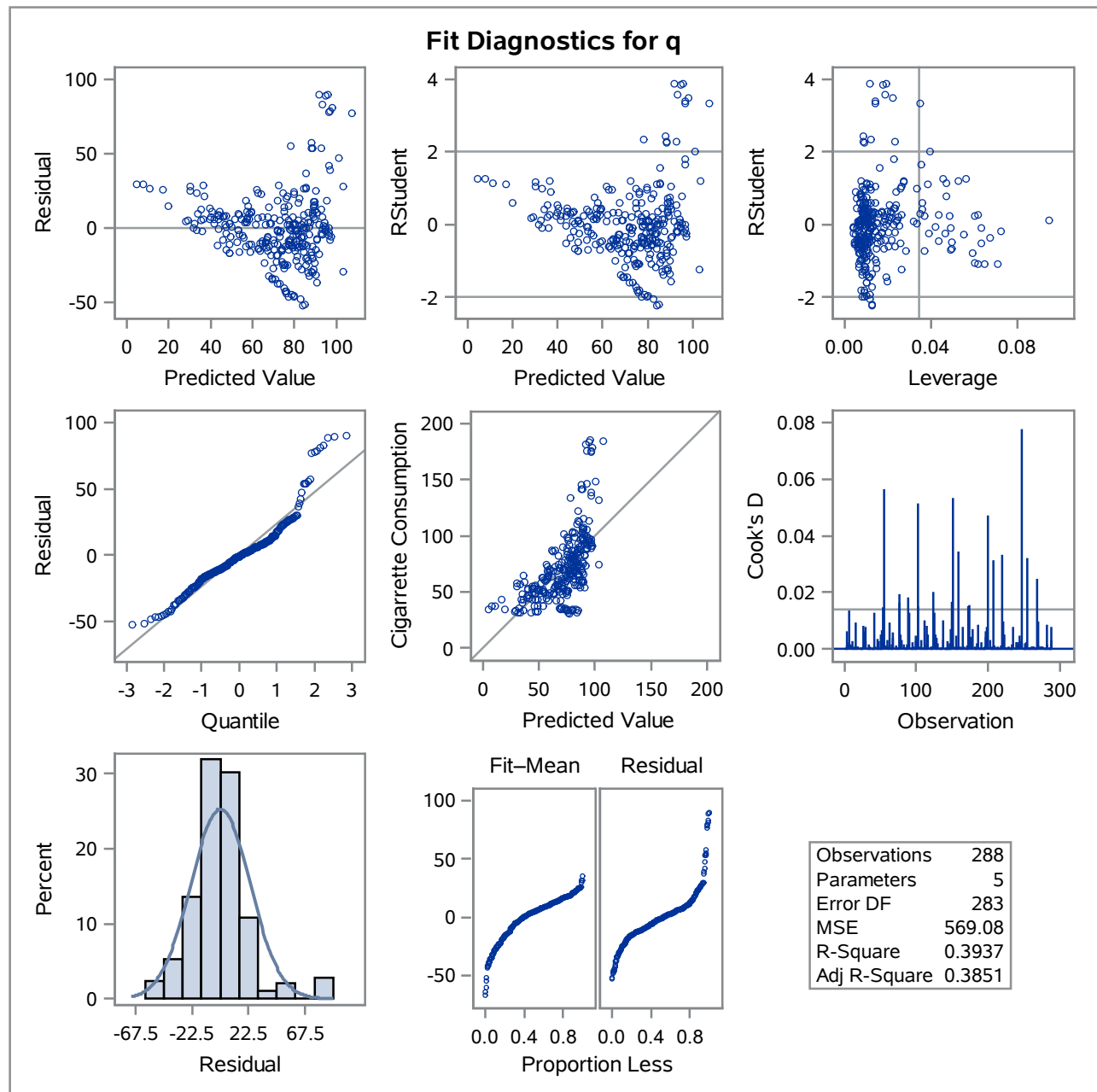
Fit Diagnostics for q

Observations	288
Parameters	5
Error DF	283
MSE	569.08
R-Square	0.3937
Adj R-Square	0.3851

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
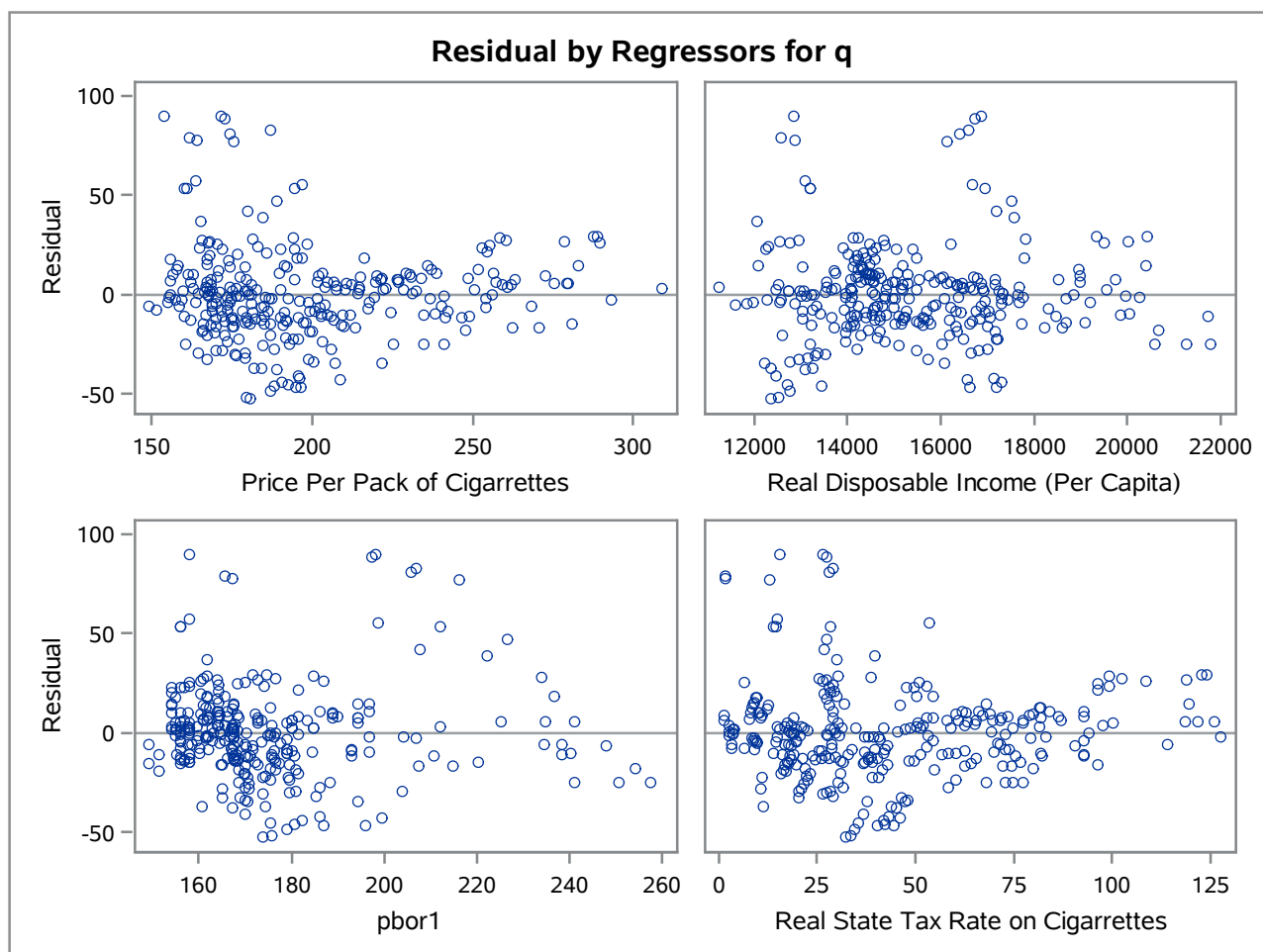
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	99804	33268	56.98	<.0001
Error	284	165823	583.88444		
Corrected Total	287	265627			

Root MSE	24.16370	R-Square	0.3757
Dependent Mean	71.76944	Adj R-Sq	0.3691
Coeff Var	33.66851		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	133.38071	13.23102	10.08	<.0001
p1	Price Per Pack of Cigarrettes	1	-0.62323	0.05375	-11.60	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00115	0.00084763	-1.36	0.1763
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.45223	0.08543	5.29	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption
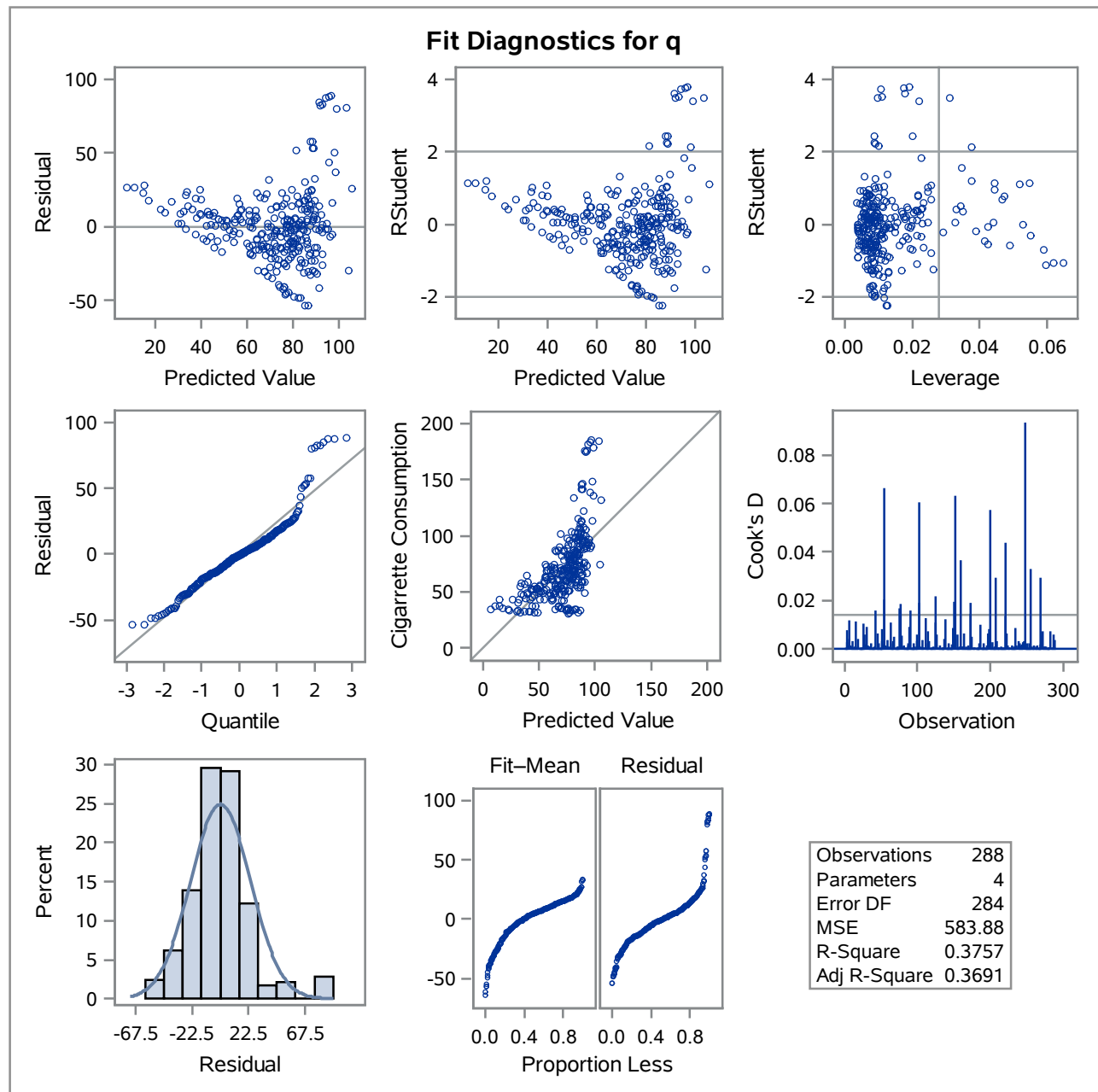
Fit Diagnostics for q

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
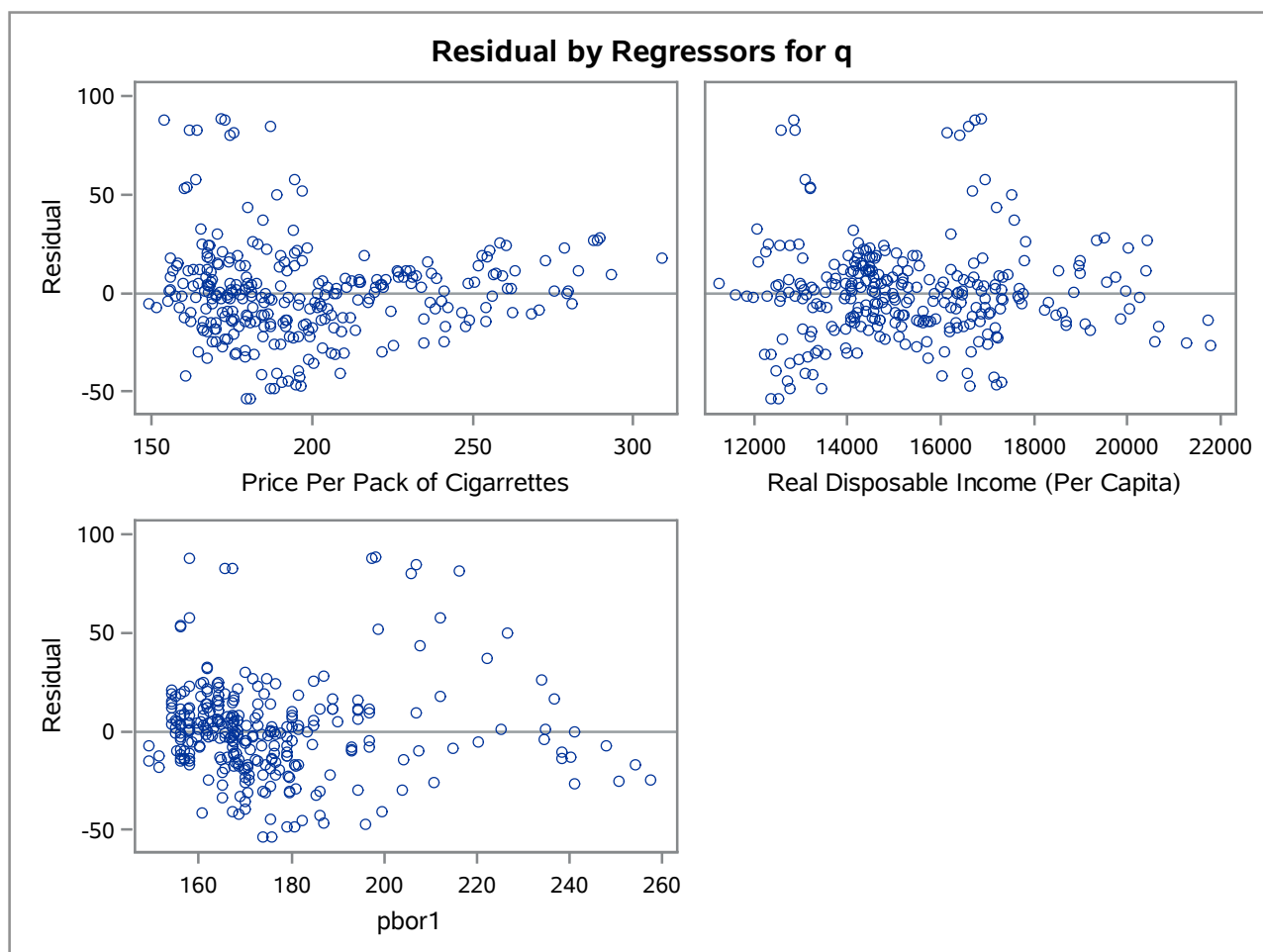
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	83444	41722	65.27	<.0001
Error	285	182183	639.23972		
Corrected Total	287	265627			

Root MSE	25.28319	R-Square	0.3141
Dependent Mean	71.76944	Adj R-Sq	0.3093
Coeff Var	35.22835		

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	170.51293	11.73808	14.53	<.0001
p1	Price Per Pack of Cigarrettes	1	-0.51844	0.05228	-9.92	<.0001
DPI1	Real Disposable Income (Per Capita)	1	0.00024744	0.00084285	0.29	0.7693

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption
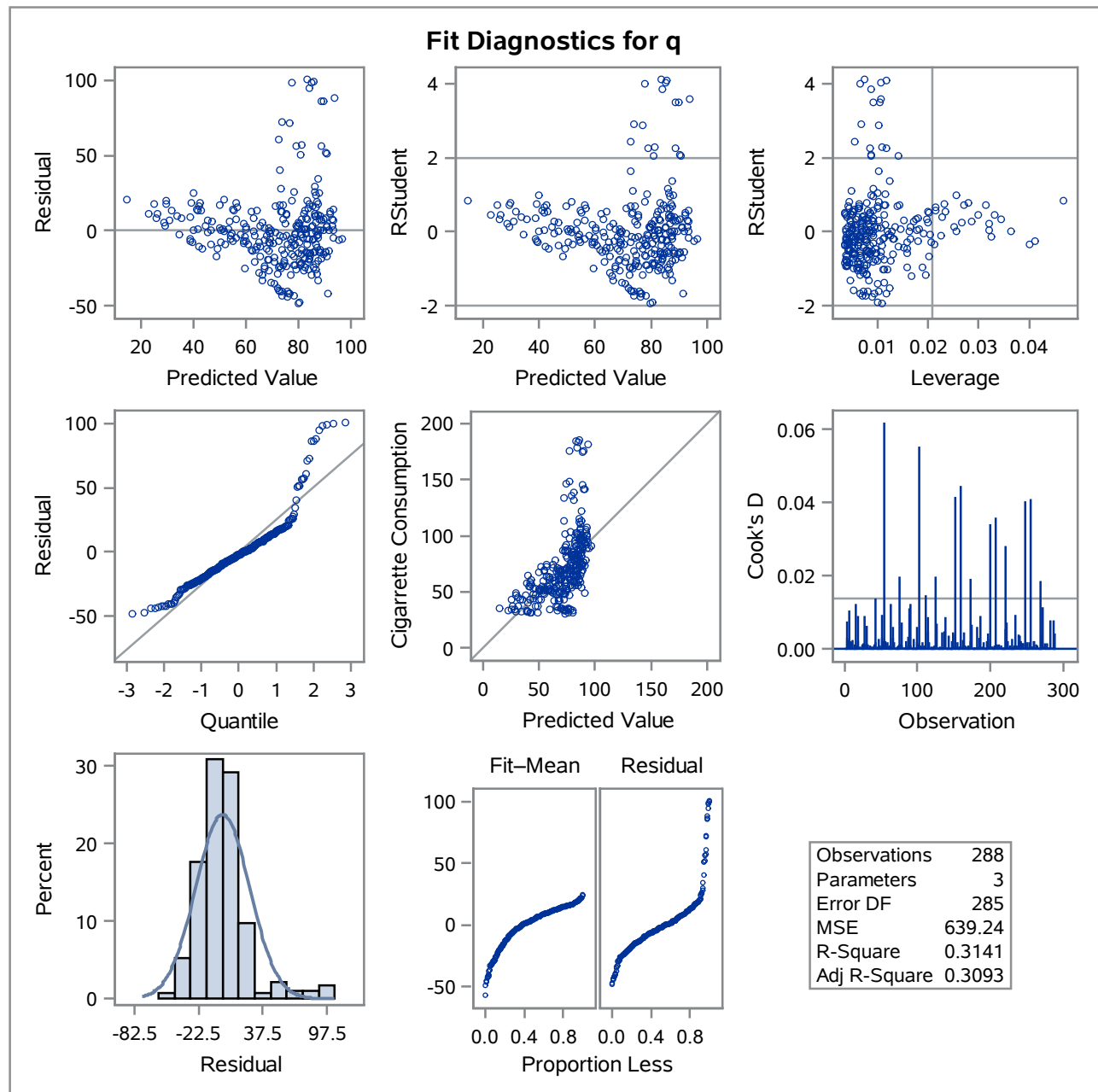
Fit Diagnostics for q

Observations	288
Parameters	3
Error DF	285
MSE	639.24
R-Square	0.3141
Adj R-Square	0.3093

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
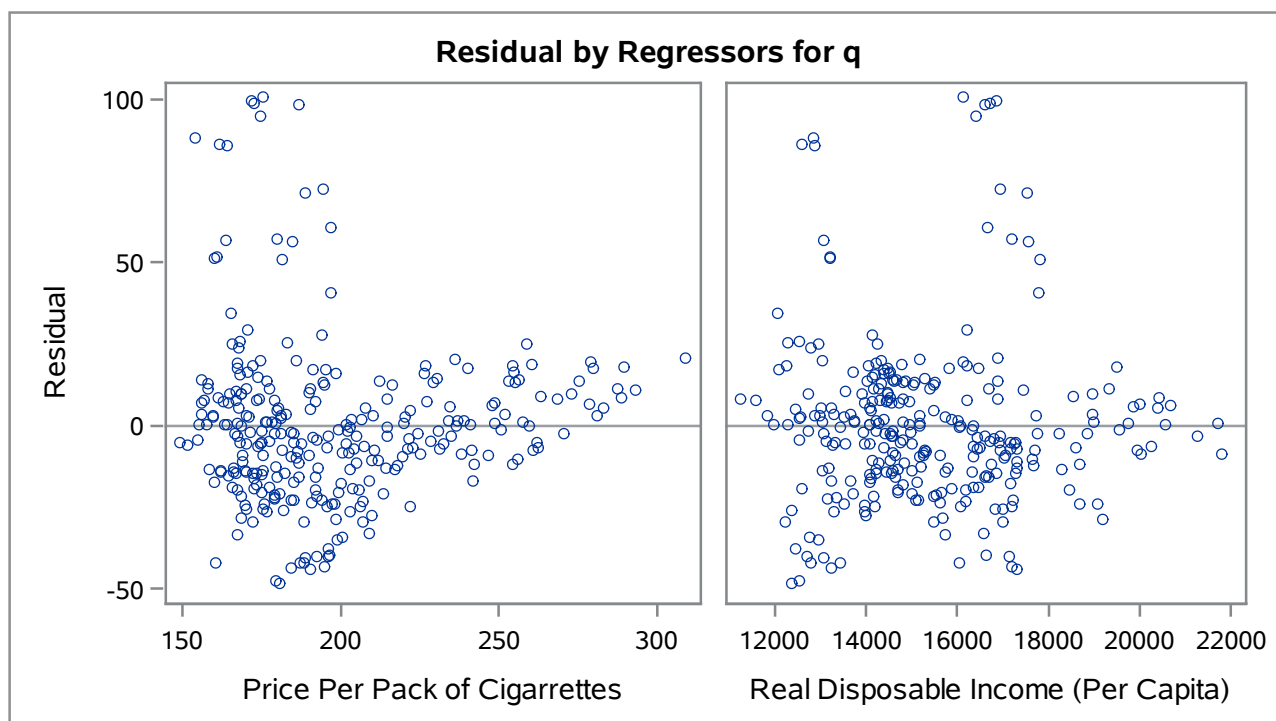
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

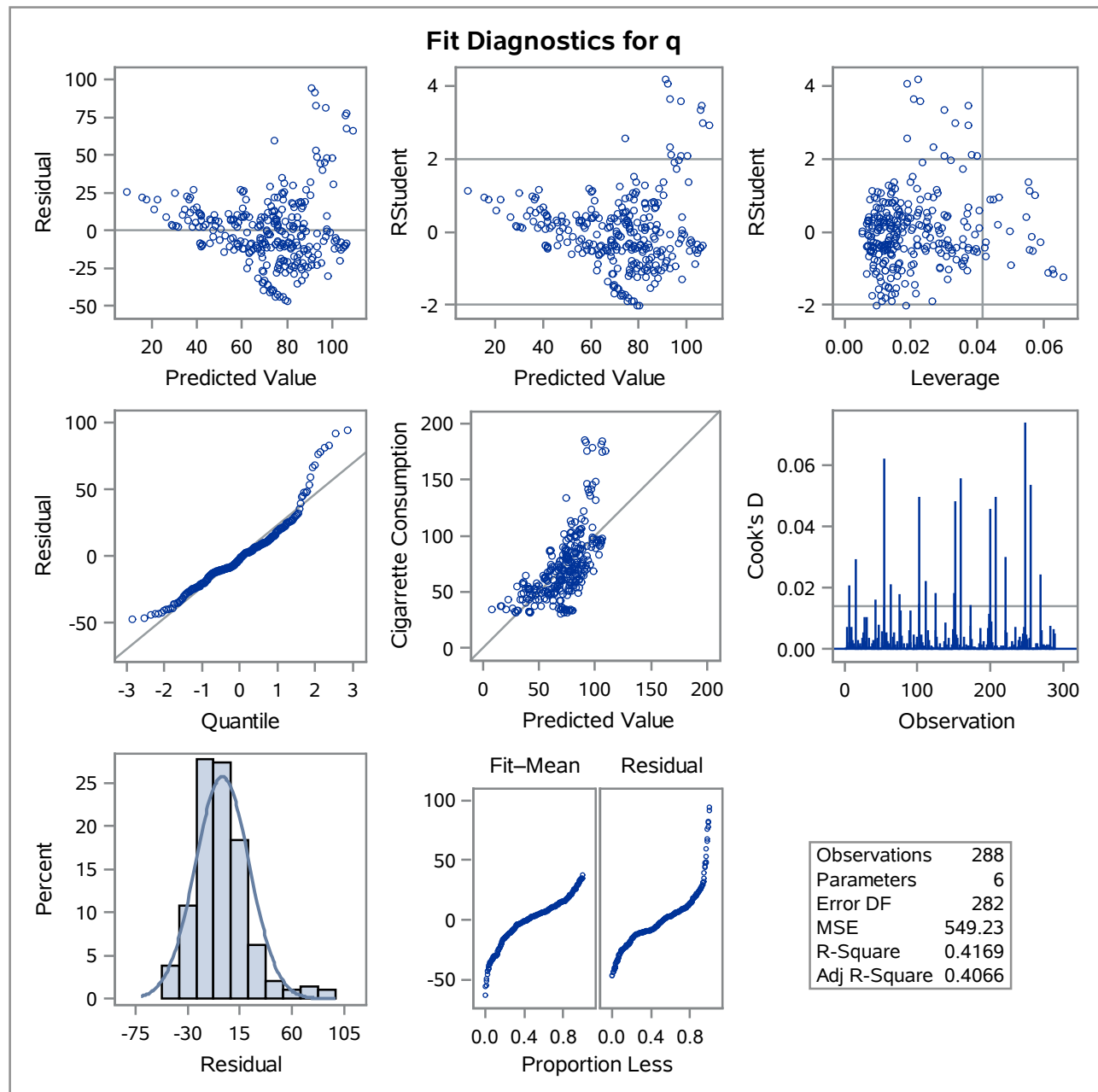| Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	110743	22149	40.33	<.0001
Error	282	154884	549.23332		
Corrected Total	287	265627			

Root MSE	23.43573	R-Square	0.4169
Dependent Mean	71.76944	Adj R-Sq	0.4066
Coeff Var	32.65419		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	42.55264	30.15950	1.41	0.1594
p1	Price Per Pack of Cigarrettes	1	-0.58295	0.05414	-10.77	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00066695	0.00084849	-0.79	0.4325
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.45142	0.08463	5.33	<.0001
ftaxrt1	Real Federal Tax Rate on Cigarrettes	1	3.74239	1.35993	2.75	0.0063
producer	Tobacco Producing State	1	15.60625	4.53895	3.44	0.0007

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Fit Diagnostics for q

Observations	288
Parameters	6
Error DF	282
MSE	549.23
R-Square	0.4169
Adj R-Square	0.4066

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
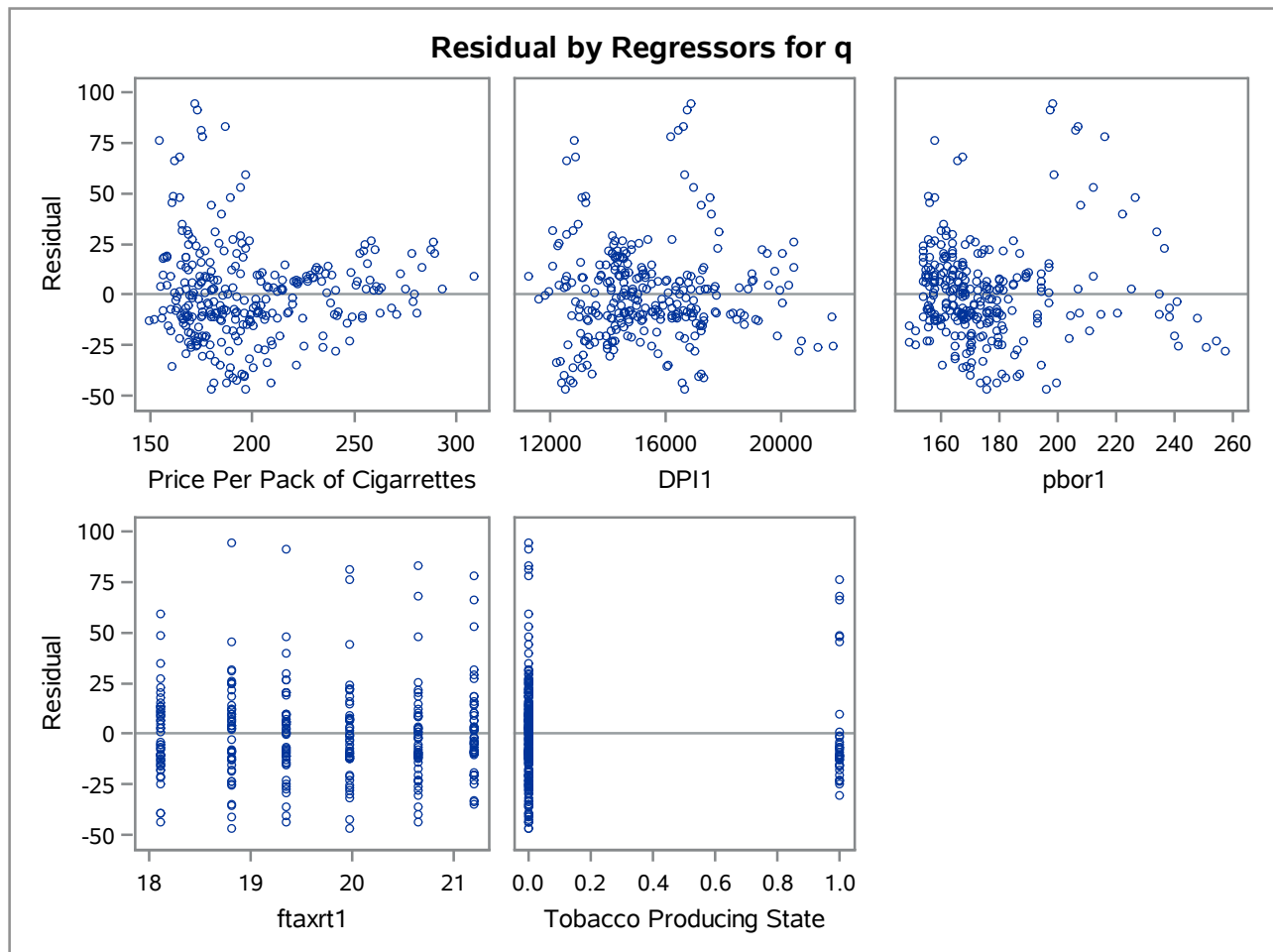
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	133471	19067	40.40	<.0001
Error	280	132156	471.98653		
Corrected Total	287	265627			

Root MSE	21.72525	R-Square	0.5025
Dependent Mean	71.76944	Adj R-Sq	0.4900
Coeff Var	30.27089		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	107.36317	16.99933	6.32	<.0001
p1	Price Per Pack of Cigarrettes	1	-0.45791	0.09207	-4.97	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00183	0.00078850	-2.33	0.0207
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.52322	0.07906	6.62	<.0001
taxrt1	Real State Tax Rate on Cigarrettes	1	-0.15646	0.10216	-1.53	0.1268
producer	Tobacco Producing State	1	10.69993	4.33319	2.47	0.0141
canada		1	-1.72633	3.53776	-0.49	0.6260
mexico	State Border with Mexico	1	-34.20410	4.83297	-7.08	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Fit Diagnostics for q

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
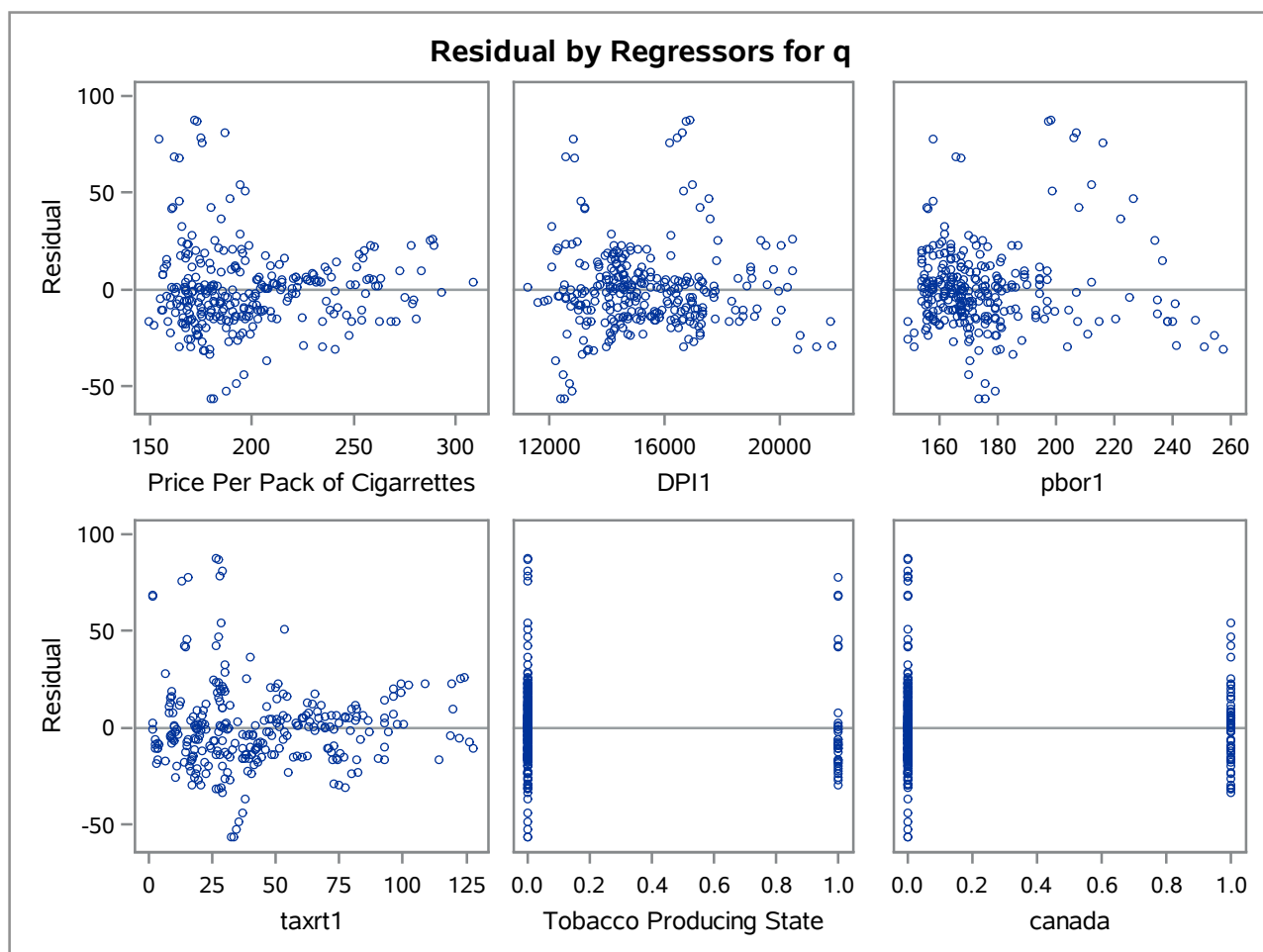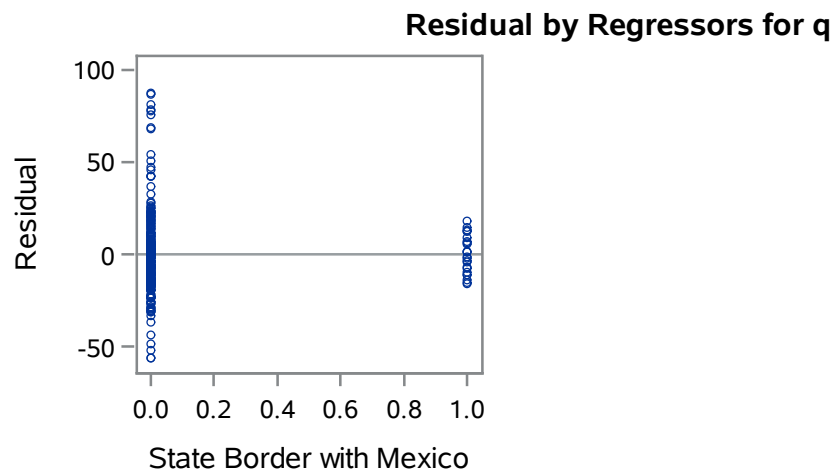
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	117201	23440	44.53	<.0001
Error	282	148426	526.33402		
Corrected Total	287	265627			

Root MSE	22.94197	R-Square	0.4412
Dependent Mean	71.76944	Adj R-Sq	0.4313
Coeff Var	31.96621		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	36.77070	12.68455	2.90	0.0040
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.36603	0.07615	4.81	<.0001
taxrt1	Real State Tax Rate on Cigarrettes	1	-0.63931	0.05704	-11.21	<.0001
producer	Tobacco Producing State	1	9.74924	4.57268	2.13	0.0339
canada		1	-2.09636	3.61658	-0.58	0.5626
mexico	State Border with Mexico	1	-29.70604	5.01427	-5.92	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption
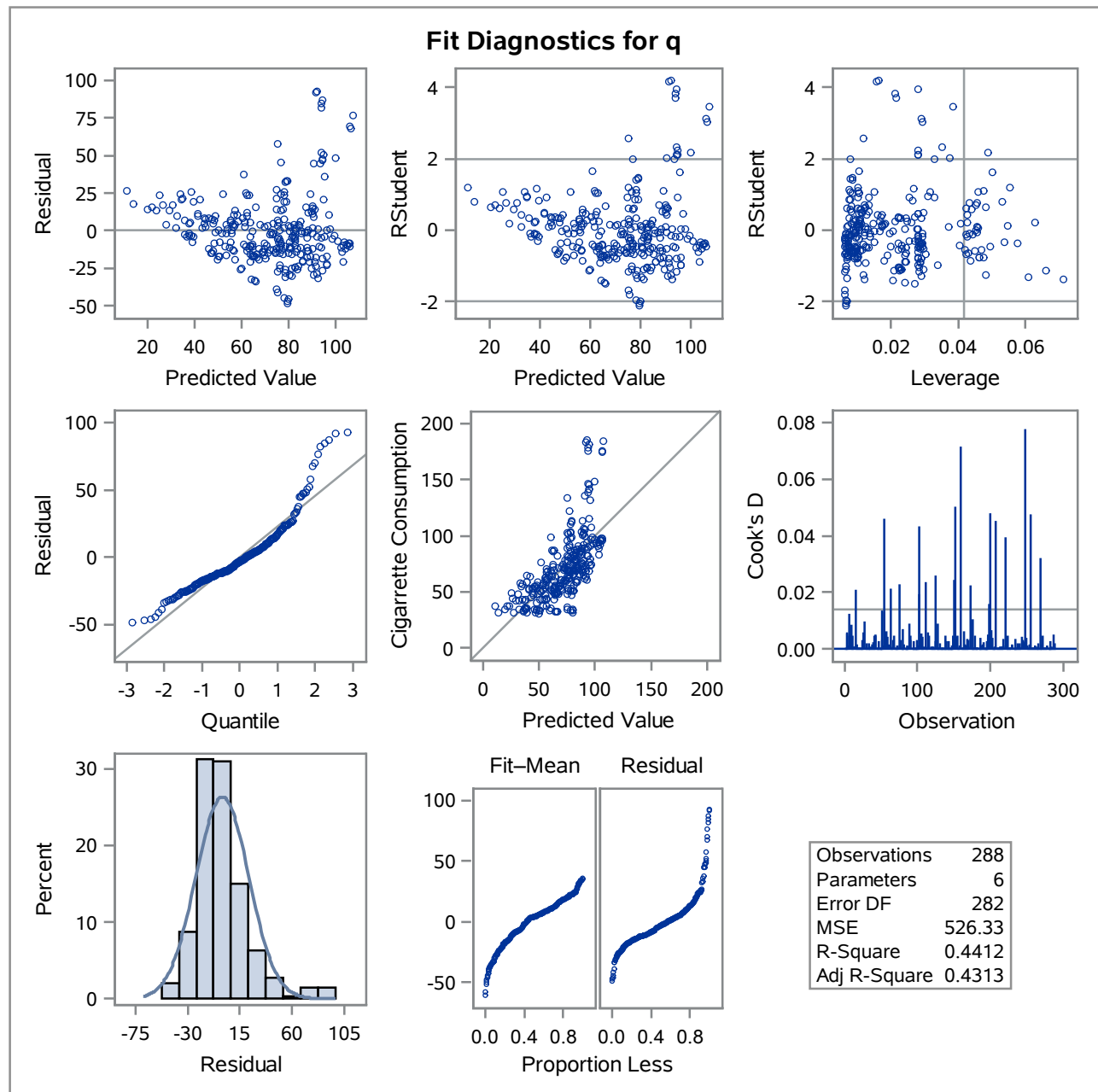
Fit Diagnostics for q

Observations	288
Parameters	6
Error DF	282
MSE	526.33
R-Square	0.4412
Adj R-Square	0.4313

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
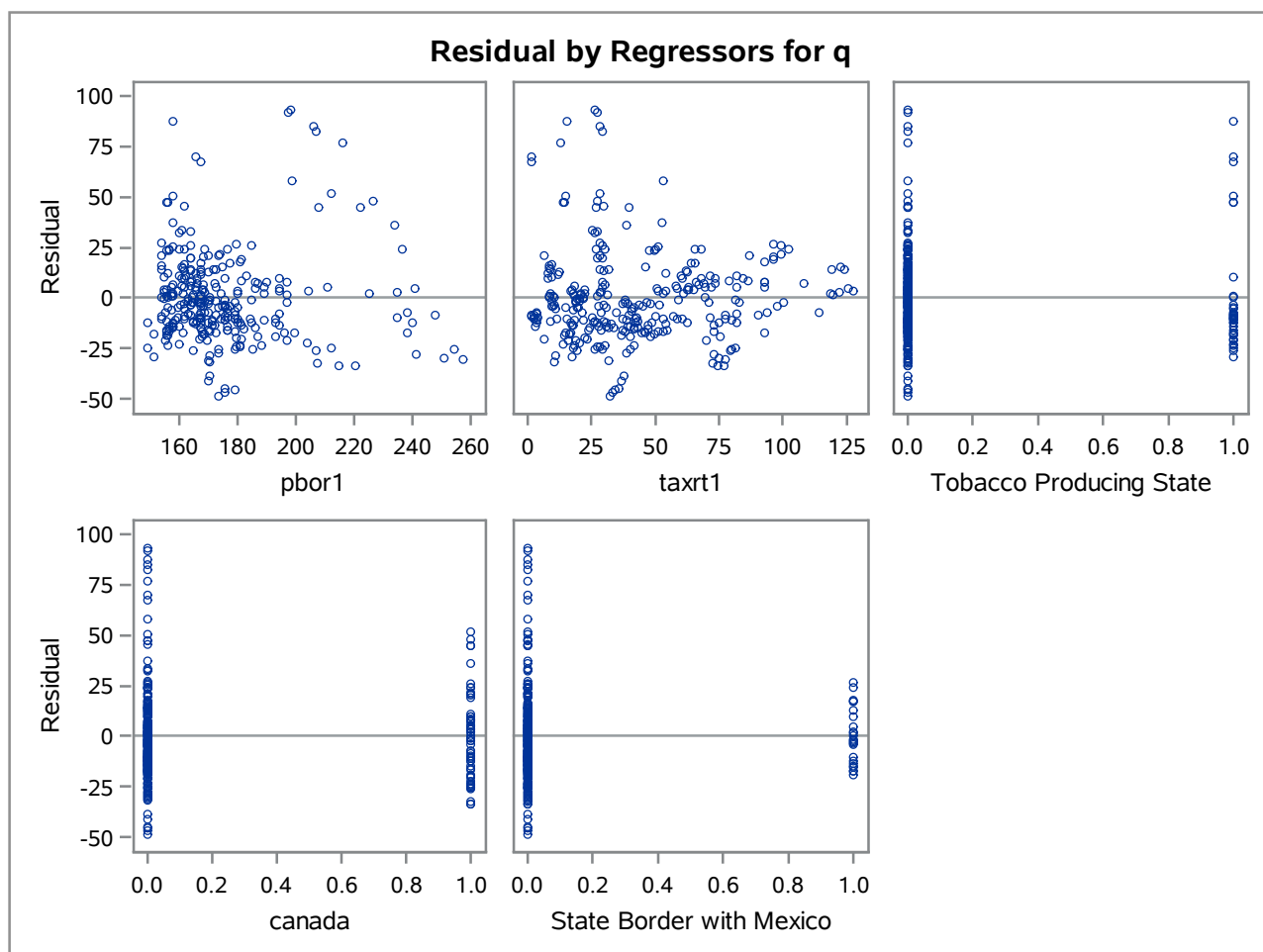
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	135921	15102	32.37	<.0001
Error	278	129706	466.56907		
Corrected Total	287	265627			

Root MSE	21.60021	R-Square	0.5117
Dependent Mean	71.76944	Adj R-Sq	0.4959
Coeff Var	30.09667		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	31.59342	1041.66148	0.03	0.9758
p1	Price Per Pack of Cigarrettes	1	-0.56846	0.10426	-5.45	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00136	0.00081356	-1.67	0.0964
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.48918	0.08029	6.09	<.0001
taxrt1	Real State Tax Rate on Cigarrettes	1	-0.02299	0.11787	-0.20	0.8455
ftaxrt1	Real Federal Tax Rate on Cigarrettes	1	3.95641	26.65143	0.15	0.8821
canada		1	-1.03673	3.53334	-0.29	0.7694
mexico	State Border with Mexico	1	-34.44685	4.80633	-7.17	<.0001
producer	Tobacco Producing State	1	11.60347	4.32627	2.68	0.0078
cpi1		1	0.06256	2.61539	0.02	0.9809

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Fit Diagnostics for q

Observations		288
Parameters		10
Error DF		278
MSE		466.57
R-Square		0.5117
Adj R-Square		0.4959

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
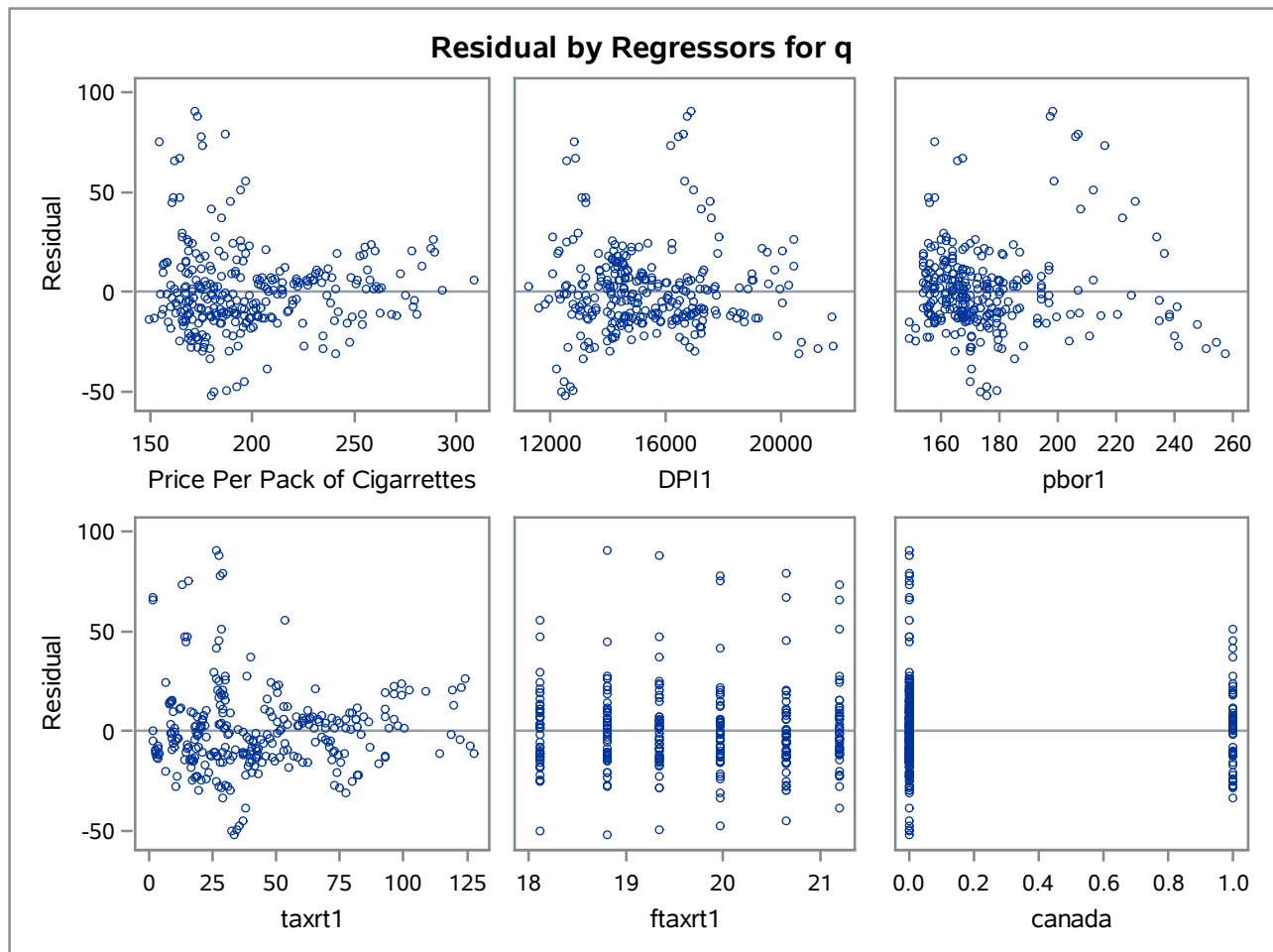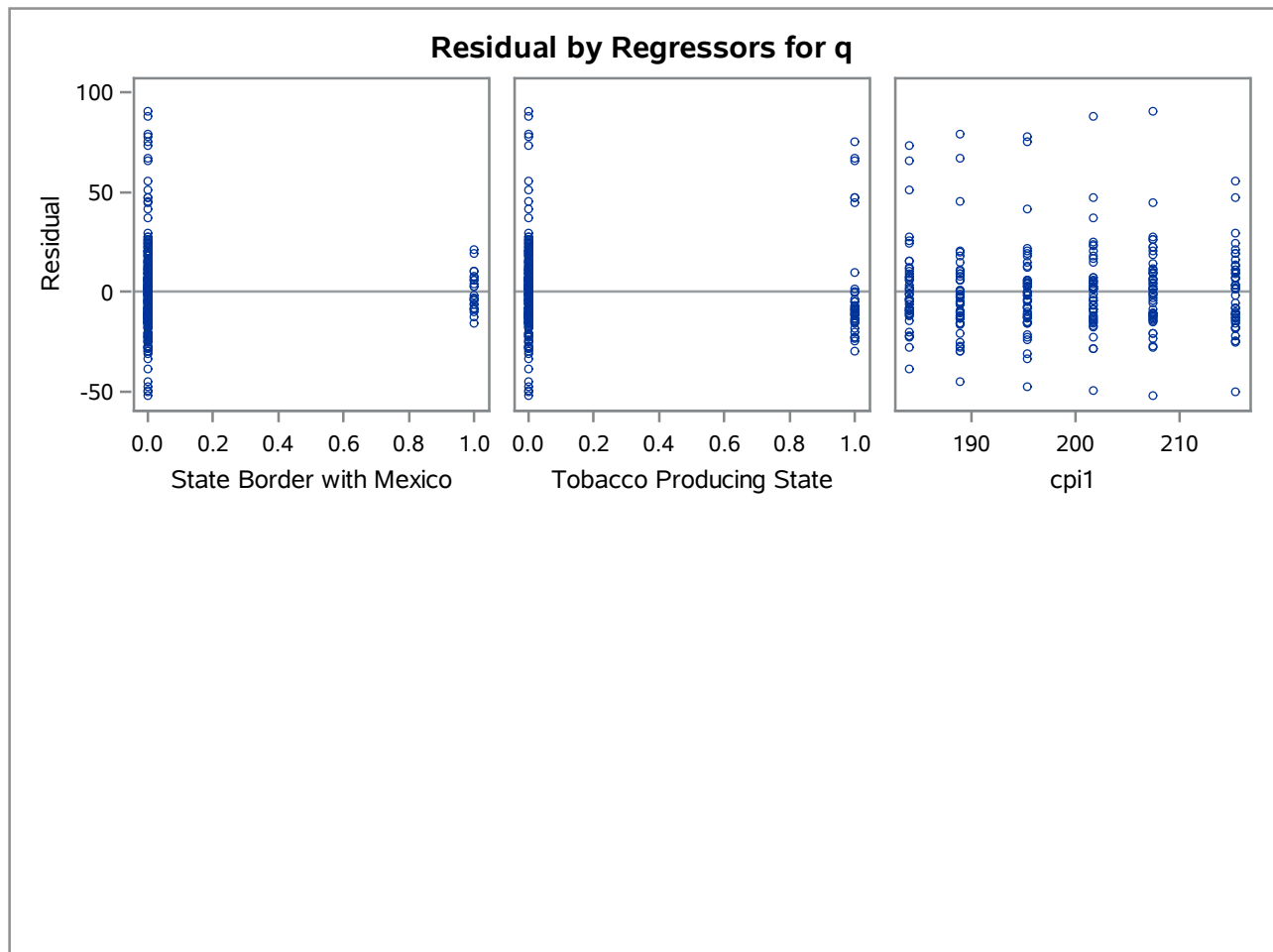
The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Number of Observations Read	288
Number of Observations Used	288

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	132247	26449	55.92	<.0001
Error	282	133380	472.98010		
Corrected Total	287	265627			

Root MSE	21.74811	R-Square	0.4979
Dependent Mean	71.76944	Adj R-Sq	0.4890
Coeff Var	30.30274		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	125.27359	12.77274	9.81	<.0001
p1	Price Per Pack of Cigarrettes	1	-0.58126	0.05014	-11.59	<.0001
DPI1	Real Disposable Income (Per Capita)	1	-0.00183	0.00076752	-2.39	0.0175
pbor1	Real Minimum Retail Price for Geographically Close State	1	0.51894	0.07761	6.69	<.0001
mexico	State Border with Mexico	1	-34.63399	4.70189	-7.37	<.0001
producer	Tobacco Producing State	1	12.15593	4.24183	2.87	0.0045

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption
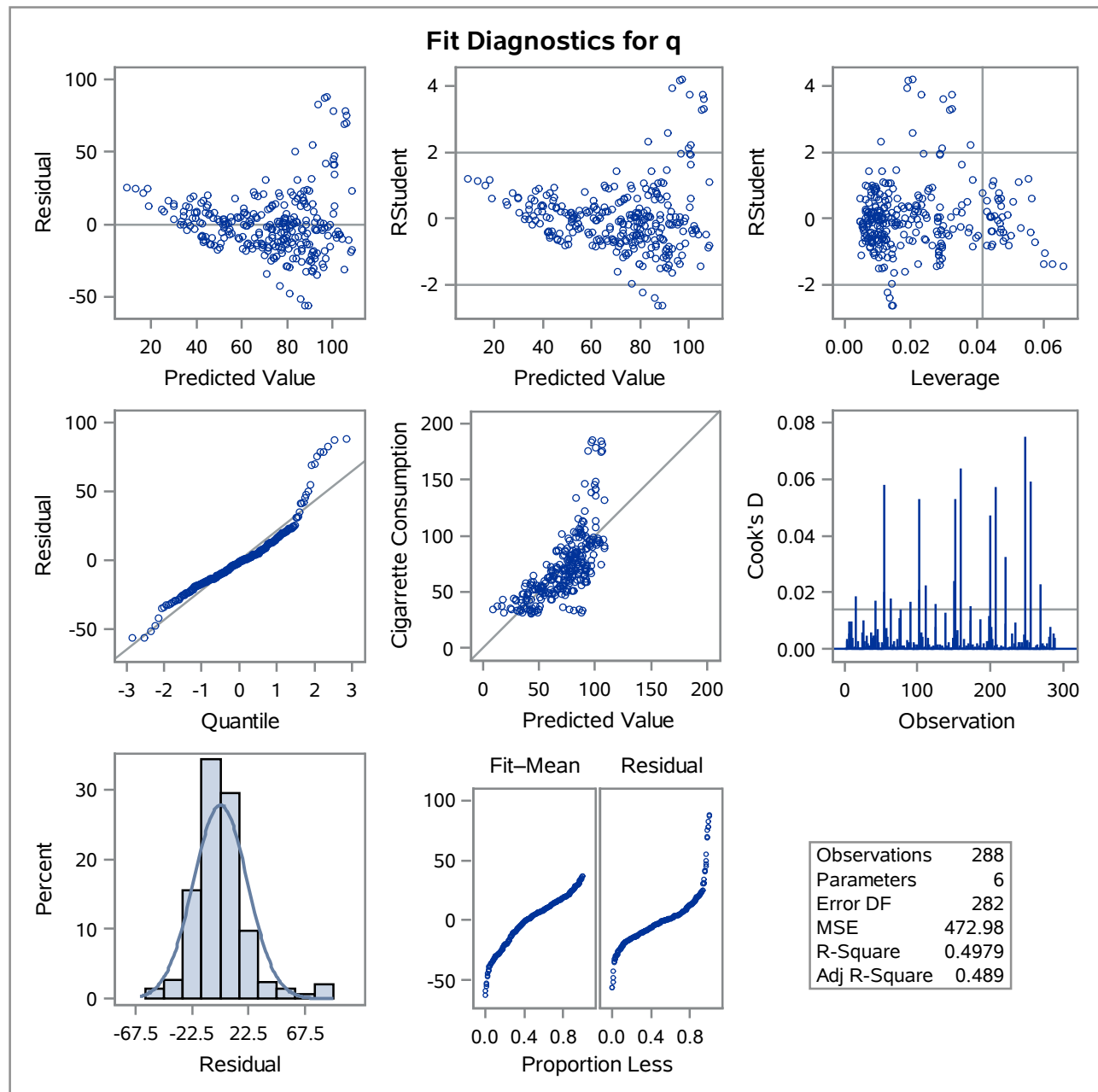
Fit Diagnostics for q

The REG Procedure
Model: MODEL1
Dependent Variable: q Cigarrette Consumption

Residual by Regressors for q
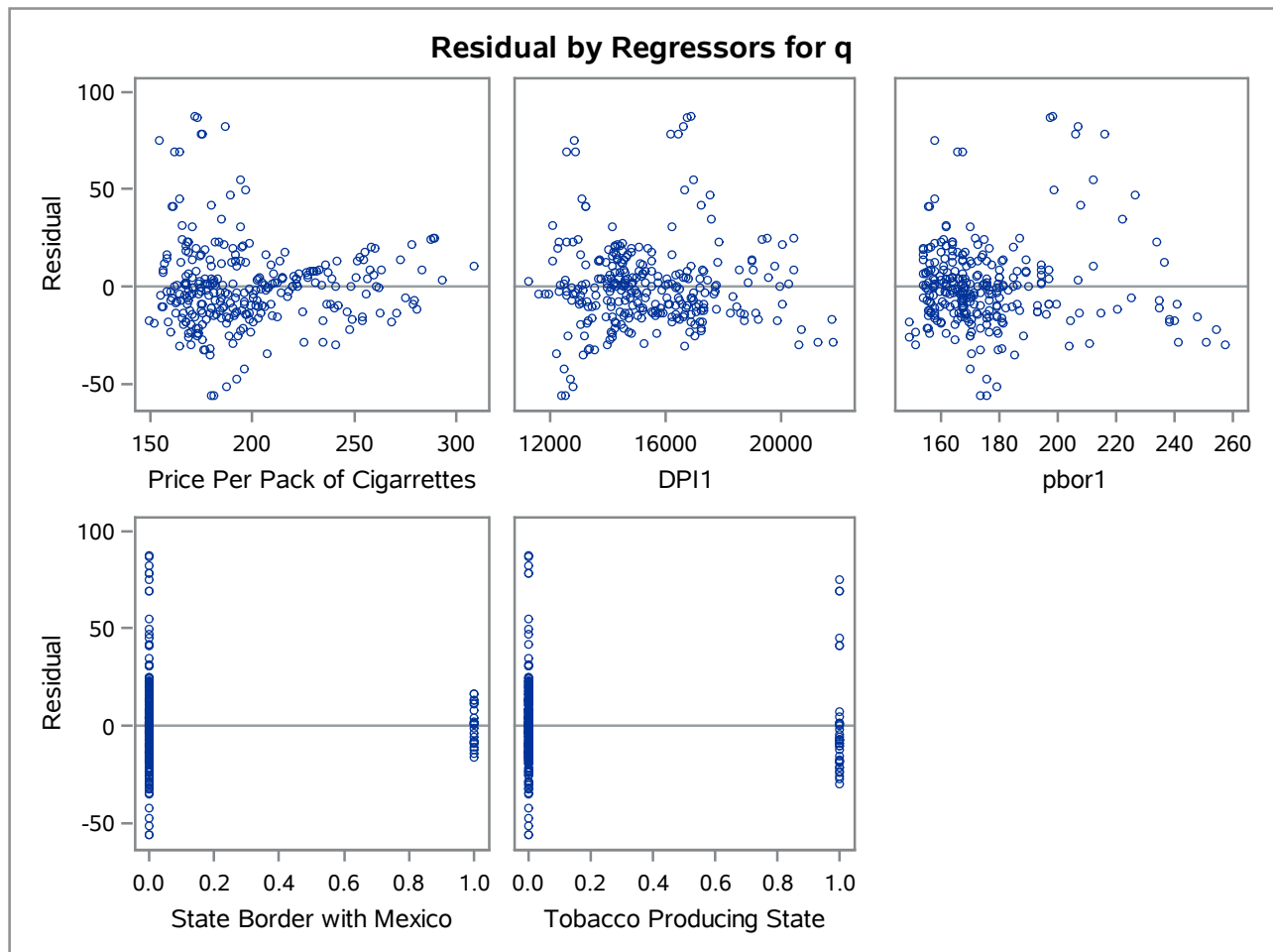
The TTEST Procedure

Variable: taxrt

producer	N	Mean	Std Dev	Std Err	Minimum	Maximum
0	42	121.8	67.5172	10.4181	17.0000	275.0
1	6	33.5000	17.6267	7.1961	7.0000	62.0000
Diff (1-2)		88.3024	64.0066	27.9348		

producer	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
0		121.8	100.8	142.8	67.5172	55.5535	86.0956
1		33.5000	15.0019	51.9981	17.6267	11.0027	43.2315
Diff (1-2)	Pooled	88.3024	32.0726	144.5	64.0066	53.1879	80.3914
Diff (1-2)	Satterthwaite	88.3024	62.4854	114.1			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	46	3.16	0.0028
Satterthwaite	Unequal	31.207	6.97	<.0001

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	41	5	14.67	0.0069

The TTEST Procedure

Variable: taxrt

Distribution of taxrt

Q-Q Plots of taxrt