6 Variables: DV E5 E1 E2 E3 E4

	Simple Statistics											
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum						
DV	2000	101.07470	2.55257	202149	94.54230	110.26185						
E1	2000	0.01665	0.98616	33.30883	-3.48191	4.08872						
E2	2000	0.01430	0.96679	28.60749	-3.83932	3.11952						
E3	2000	-0.01937	0.97194	-38.73444	-3.54710	3.62252						
E4	2000	0.01283	0.99354	25.66769	-3.98419	3.46805						
E5	2000	-0.02902	1.00531	-58.04492	-3.10027	3.34716						

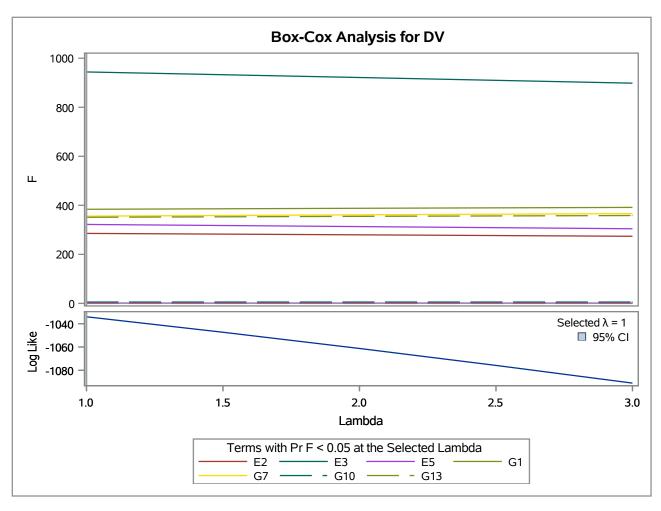
	Pearson Correlation Coefficients, N = 2000 Prob >  r  under H0: Rho=0											
	DV	E1	E2	E3	E4	E5						
DV	1.00000	0.00250 0.9112	0.26681 <.0001	0.43850 <.0001	0.00786 0.7253	0.25195 <.0001						
E1	0.00250 0.9112	1.00000	-0.06484 0.0037	0.01306 0.5595	0.01362 0.5426	-0.03747 0.0939						
E2	0.26681 <.0001	-0.06484 0.0037	1.00000	-0.02238 0.3171	-0.03664 0.1014	-0.00628 0.7790						
E3	0.43850 <.0001	0.01306 0.5595	-0.02238 0.3171	1.00000	0.02309 0.3020	-0.01247 0.5772						
E4	0.00786 0.7253	0.01362 0.5426	-0.03664 0.1014	0.02309 0.3020	1.00000	-0.02088 0.3507						
E5	0.25195 <.0001	-0.03747 0.0939	-0.00628 0.7790	-0.01247 0.5772	-0.02088 0.3507	1.00000						

DV G1 G2 G3 G15 16 Variables: G4 G5 G6 G7 G8 G9 G10 G11 G12 G13 G14

			Simple Sta	tistics		
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
DV	2000	101.07470	2.55257	202149	94.54230	110.26185
G1	2000	0.50800	0.50006	1016	0	1.00000
G2	2000	0.50400	0.50011	1008	0	1.00000
G3	2000	0.49500	0.50010	990.00000	0	1.00000
G4	2000	0.49500	0.50010	990.00000	0	1.00000
G5	2000	0.48150	0.49978	963.00000	0	1.00000
G6	2000	0.50100	0.50012	1002	0	1.00000
G7	2000	0.51400	0.49993	1028	0	1.00000
G8	2000	0.48850	0.49999	977.00000	0	1.00000
G9	2000	0.47950	0.49970	959.00000	0	1.00000
G10	2000	0.49000	0.50003	980.00000	0	1.00000
G11	2000	0.49400	0.50009	988.00000	0	1.00000
G12	2000	0.49200	0.50006	984.00000	0	1.00000
G13	2000	0.53500	0.49890	1070	0	1.00000
G14	2000	0.50000	0.50013	1000	0	1.00000
G15	2000	0.49450	0.50009	989.00000	0	1.00000

	Pearson Correlation Coefficients, N = 2000 Prob >  r  under H0: Rho=0											
	DV	G1	G2	G3	G4	G5	G6	G7	G8	G9		
DV	1.00000	0.29610 <.0001	0.04078 0.0682	0.02729 0.2225	-0.01951 0.3833	-0.02498 0.2641	-0.03006 0.1790	0.25933 <.0001	-0.02358 0.2919	-0.01012 0.6509		
G1	0.29610 <.0001	1.00000	-0.00413 0.8536	0.00616 0.7830	0.03217 0.1504	-0.00041 0.9854	0.00797 0.7217	0.00555 0.8039	-0.00864 0.6995	-0.01836 0.4118		
G2	0.04078 0.0682	-0.00413 0.8536	1.00000	0.02808 0.2094	-0.01592 0.4767	-0.02472 0.2691	-0.00202 0.9282	0.00378 0.8659	-0.03483 0.1195	-0.03270 0.1438		
G3	0.02729 0.2225	0.00616 0.7830	0.02808 0.2094	1.00000	-0.01610 0.4717	0.02865 0.2003	0.03202 0.1523	-0.00172 0.9387	0.00277 0.9014	0.00059 0.9789		
G4	-0.01951 0.3833	0.03217 0.1504	-0.01592 0.4767	-0.01610 0.4717	1.00000	-0.01338 0.5498	-0.00198 0.9295	-0.02573 0.2501	0.00077 0.9725	-0.02543 0.2556		
G5	-0.02498 0.2641	-0.00041 0.9854	-0.02472 0.2691	0.02865 0.2003	-0.01338 0.5498	1.00000	0.01909 0.3936	-0.03600 0.1075	0.00115 0.9590	-0.00152 0.9459		
G6	-0.03006 0.1790	0.00797 0.7217	-0.00202 0.9282	0.03202 0.1523	-0.00198 0.9295	0.01909 0.3936	1.00000	-0.00006 0.9980	-0.03096 0.1663	-0.00893 0.6900		
G7	0.25933 <.0001	0.00555 0.8039	0.00378 0.8659	-0.00172 0.9387	-0.02573 0.2501	-0.03600 0.1075	-0.00006 0.9980	1.00000	-0.00836 0.7086	-0.01988 0.3743		
G8	-0.02358 0.2919	-0.00864 0.6995	-0.03483 0.1195	0.00277 0.9014	0.00077 0.9725	0.00115 0.9590	-0.03096 0.1663	-0.00836 0.7086	1.00000	-0.03298 0.1404		
G9	-0.01012 0.6509	-0.01836 0.4118	-0.03270 0.1438	0.00059 0.9789	-0.02543 0.2556	-0.00152 0.9459	-0.00893 0.6900	-0.01988 0.3743	-0.03298 0.1404	1.00000		
G10	0.00374 0.8672	-0.00768 0.7313	0.02417 0.2801	-0.00620 0.7816	0.01780 0.4261	-0.02176 0.3307	0.02004 0.3703	-0.01545 0.4899	-0.00146 0.9479	-0.03786 0.0905		
G11	0.03619 0.1056	0.01419 0.5258	0.00410 0.8547	-0.01012 0.6510	0.01388 0.5350	-0.00945 0.6727	-0.03198 0.1528	-0.02167 0.3326	-0.01128 0.6142	0.00051 0.9819		
G12	-0.00581 0.7952	0.00026 0.9909	-0.02188 0.3282	0.02184 0.3289	-0.00816 0.7153	0.03043 0.1737	0.01403 0.5305	-0.00756 0.7356	-0.00337 0.8803	0.01035 0.6435		
G13	0.28774 <.0001	-0.01516 0.4981	0.00946 0.6723	0.00070 0.9750	-0.02737 0.2212	0.02768 0.2160	-0.01618 0.4696	-0.00798 0.7213	-0.00340 0.8792	0.03800 0.0894		
G14	-0.00895 0.6890	-0.03200 0.1525	0.02000 0.3713	-0.01000 0.6549	-0.03000 0.1799	-0.01501 0.5023	-0.02400 0.2834	-0.03001 0.1797	-0.02901 0.1947	-0.00300 0.8932		
G15	-0.01308 0.5587	-0.05683 0.0110	-0.00491 0.8262	-0.02111 0.3453	0.01889 0.3984	-0.02242 0.3162	0.00502 0.8224	0.02132 0.3407	0.00575 0.7972	0.01556 0.4867		

	Pearson Correlation Coefficients, N = 2000 Prob >  r  under H0: Rho=0									
	G10	G11	G12	G13	G14	G15				
DV	0.00374	0.03619	-0.00581	0.28774	-0.00895	-0.01308				
	0.8672	0.1056	0.7952	<.0001	0.6890	0.5587				
G1	-0.00768	0.01419	0.00026	-0.01516	-0.03200	-0.05683				
	0.7313	0.5258	0.9909	0.4981	0.1525	0.0110				
G2	0.02417	0.00410	-0.02188	0.00946	0.02000	-0.00491				
	0.2801	0.8547	0.3282	0.6723	0.3713	0.8262				
G3	-0.00620	-0.01012	0.02184	0.00070	-0.01000	-0.02111				
	0.7816	0.6510	0.3289	0.9750	0.6549	0.3453				
G4	0.01780	0.01388	-0.00816	-0.02737	-0.03000	0.01889				
	0.4261	0.5350	0.7153	0.2212	0.1799	0.3984				
G5	-0.02176	-0.00945	0.03043	0.02768	-0.01501	-0.02242				
	0.3307	0.6727	0.1737	0.2160	0.5023	0.3162				
G6	0.02004	-0.03198	0.01403	-0.01618	-0.02400	0.00502				
	0.3703	0.1528	0.5305	0.4696	0.2834	0.8224				
G7	-0.01545	-0.02167	-0.00756	-0.00798	-0.03001	0.02132				
	0.4899	0.3326	0.7356	0.7213	0.1797	0.3407				
G8	-0.00146	-0.01128	-0.00337	-0.00340	-0.02901	0.00575				
	0.9479	0.6142	0.8803	0.8792	0.1947	0.7972				
G9	-0.03786	0.00051	0.01035	0.03800	-0.00300	0.01556				
	0.0905	0.9819	0.6435	0.0894	0.8932	0.4867				
G10	1.00000	-0.01224 0.5842	0.01368 0.5408	-0.04071 0.0687	0.00800 0.7206	-0.02123 0.3427				
G11	-0.01224 0.5842	1.00000	-0.01419 0.5258	0.02691 0.2290	0.02400 0.2833	-0.03114 0.1639				
G12	0.01368 0.5408	-0.01419 0.5258	1.00000	0.03321 0.1377	-0.03200 0.1525	0.01483 0.5075				
G13	-0.04071 0.0687	0.02691 0.2290	0.03321 0.1377	1.00000	0.03007 0.1788	-0.00825 0.7123				
G14	0.00800 0.7206	0.02400 0.2833	-0.03200 0.1525	0.03007 0.1788	1.00000	0.01100 0.6230				
G15	-0.02123 0.3427	-0.03114 0.1639	0.01483 0.5075	-0.00825 0.7123	0.01100 0.6230	1.00000				



## **Dependent Variable BoxCox(DV)**

Number of Observations Read	2000
Number of Observations Used	2000

	Model Statement Specification Details										
Туре	DF	Variable	Description	Value							
Dep	1 BoxCox(DV)		Lambda Used	1							
			Lambda	1							
			Log Likelihood	-1034.0							
			Conv. Lambda	1							
			Conv. Lambda LL	-1034.0							
			CI Limit	-1036.0							
			Alpha	0.05							
Ind	1	Identity(E1)	DF	1							
Ind	1	Identity(E2)	DF	1							
Ind	1	Identity(E3)	DF	1							
Ind	1	Identity(E4)	DF	1							
Ind	1	Identity(E5)	DF	1							
Ind	1	Identity(G1)	DF	1							
Ind	1	Identity(G2)	DF	1							
Ind	1	Identity(G3)	DF	1							
Ind	1	Identity(G4)	DF	1							
Ind	1	Identity(G5)	DF	1							
Ind	1	Identity(G6)	DF	1							
Ind	1	Identity(G7)	DF	1							
Ind	1	Identity(G8)	DF	1							
Ind	1	Identity(G9)	DF	1							
Ind	1	Identity(G10)	DF	1							
Ind	1	Identity(G11)	DF	1							
Ind	1	Identity(G12)	DF	1							
Ind	1	Identity(G13)	DF	1							
Ind	1	Identity(G14)	DF	1							
Ind	1	Identity(G15)	DF	1							

## The TRANSREG Procedure Hypothesis Tests for BoxCox(DV)

Univariate ANOVA Table Based on the Usual Degrees of Freedom								
Source	DF	Sum of Squares	Mean Square	F Value	Liberal p			
Model	20	7458.92	372.9460	132.61	>= <.0001			
Error	1979	5565.77	2.8124					
Corrected Total	1999	13024.69						

The above statistics are not adjusted for the fact that the dependent variable was transformed and so are generally liberal.

Root MSE	1.67703	R-Square	0.5727
Dependent Mean	100.07470	Adj R-Sq	0.5684
Coeff Var	1.67577	Lambda	1.0000

Univariate	Univariate Regression Table Based on the Usual Degrees of Freedom									
Variable DF		Coefficient	Type II Sum of Squares	Mean Square	F Value	Liberal p				
Intercept	1	97.7799301	1131668	1131668	402383	>= <.0001				
Identity(E1)	1	0.0515177	5	5	1.81	>= 0.1783				
Identity(E2)	1	0.6599444	803	803	285.41	>= <.0001				
Identity(E3)	1	1.1915647	2655	2655	944.02	>= <.0001				
Identity(E4)	1	0.0179326	1	1	0.22	>= 0.6360				
Identity(E5)	1	0.6726451	906	906	321.99	>= <.0001				
Identity(G1)	1	1.4751580	1079	1079	383.82	>= <.0001				
Identity(G2)	1	0.0671078	2	2	0.79	>= 0.3731				
Identity(G3)	1	0.0351556	1	1	0.22	>= 0.6403				
Identity(G4)	1	-0.0149119	0	0	0.04	>= 0.8431				
Identity(G5)	1	-0.0748752	3	3	0.99	>= 0.3203				
Identity(G6)	1	-0.0871160	4	4	1.34	>= 0.2471				
Identity(G7)	1	1.4229394	1001	1001	355.81	>= <.0001				
Identity(G8)	1	-0.0838171	3	3	1.24	>= 0.2656				
Identity(G9)	1	0.0258938	0	0	0.12	>= 0.7316				
Identity(G10)	1	0.1763554	15	15	5.48	>= 0.0193				
Identity(G11)	1	0.0943009	4	4	1.57	>= 0.2102				
Identity(G12)	1	-0.0107862	0	0	0.02	>= 0.8861				
Identity(G13)	1	1.4160316	988	988	351.14	>= <.0001				
Identity(G14)	1	0.0327208	1	1	0.19	>= 0.6640				
Identity(G15)	1	0.0178433	0	0	0.06	>= 0.8128				

The above statistics are not adjusted for the fact that the dependent variable was transformed and so are generally liberal.

Number of Observations Read	2000
Number of Observations Used	2000

Stepwise Selection: Step 1

## Variable g1g13 Entered: R-Square = 0.2465 and C(p) = 4793.413

Analysis of Variance						
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F	
Model	1	3210.77954	3210.77954	653.68	<.0001	
Error	1998	9813.91425	4.91187			
Corrected Total	1999	13025				

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	100.30804	0.05792	14730333	2998926	<.0001
g1g13	2.86067	0.11189	3210.77954	653.68	<.0001

Bounds on condition number: 1, 1

**Stepwise Selection: Step 2** 

## Variable E3 Entered: R-Square = 0.4342 and C(p) = 3104.301

Analysis of Variance							
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F		
Model	2	5655.23657	2827.61828	766.24	<.0001		
Error	1997	7369.45722	3.69026				
Corrected Total	1999	13025					

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	100.33723	0.05022	14731391	3991961	<.0001
E3	1.13781	0.04421	2444.45702	662.41	<.0001
g1g13	2.83399	0.09699	3150.81436	853.82	<.0001

Bounds on condition number: 1.0001, 4.0005

**Stepwise Selection: Step 3** 

# Variable g1g7 Entered: R-Square = 0.5494 and C(p) = 2068.479

Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F			
Model	3	7155.38018	2385.12673	811.12	<.0001			
Error	1996	5869.31361	2.94054					
Corrected Total	1999	13025						

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	99.98290	0.04749	13031692	4431738	<.0001
E3	1.16379	0.03948	2555.16521	868.94	<.0001
g1g7	2.10407	0.09316	1500.14361	510.16	<.0001
g1g13	2.09708	0.09252	1510.72612	513.76	<.0001

Bounds on condition number: 1.1426, 9.8572

**Stepwise Selection: Step 4** 

## Variable E5 Entered: R-Square = 0.6153 and C(p) = 1476.113

Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F			
Model	4	8014.52110	2003.63027	797.83	<.0001			
Error	1995	5010.17269	2.51136					
Corrected Total	1999	13025						

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	100.00249	0.04390	13029215	5188102	<.0001
E3	1.17223	0.03649	2591.96226	1032.09	<.0001
E5	0.65217	0.03526	859.14092	342.10	<.0001
g1g7	2.10536	0.08609	1501.97110	598.07	<.0001
g1g13	2.09398	0.08550	1506.26411	599.78	<.0001

Bounds on condition number: 1.1426, 17.144

**Stepwise Selection: Step 5** 

## Variable g7g13 Entered: R-Square = 0.6802 and C(p) = 893.8298

Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F			
Model	5	8859.08641	1771.81728	848.14	<.0001			
Error	1994	4165.60738	2.08907					
Corrected Total	1999	13025						

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	99.78047	0.04154	12054816	5770420	<.0001
E3	1.18157	0.03328	2632.91834	1260.33	<.0001
E5	0.66556	0.03217	894.40381	428.13	<.0001
g1g7	1.68771	0.08122	902.04230	431.79	<.0001
g1g13	1.70250	0.08038	937.27665	448.66	<.0001
g7g13	1.60122	0.07964	844.56532	404.28	<.0001

Bounds on condition number: 1.2226, 28.214

Stepwise Selection: Step 6

## Variable E2 Entered: R-Square = 0.7374 and C(p) = 379.8206

Analysis of Variance							
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F		
Model	6	9604.96385	1600.82731	932.95	<.0001		
Error	1993	3419.72994	1.71587				
Corrected Total	1999	13025					

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	99.80196	0.03766	12050975	7023243	<.0001
E2	0.63329	0.03037	745.87744	434.69	<.0001
E3	1.19560	0.03017	2694.49709	1570.34	<.0001
E5	0.66931	0.02915	904.46483	527.12	<.0001
g1g7	1.67360	0.07361	886.95118	516.91	<.0001
g1g13	1.64065	0.07290	868.97293	506.43	<.0001
g7g13	1.56500	0.07219	806.31743	469.92	<.0001

Stepwise Selection: Step 6

Bounds on condition number: 1.2227, 39.905

**Stepwise Selection: Step 7** 

Variable G7 Entered: R-Square = 0.7450 and C(p) = 313.2780

Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F			
Model	7	9704.04024	1386.29146	831.61	<.0001			
Error	1992	3320.65355	1.66699					
Corrected Total	1999	13025						

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	100.02079	0.04673	7637594	4581655	<.0001
E2	0.64192	0.02996	765.28286	459.08	<.0001
E3	1.18937	0.02975	2664.51431	1598.39	<.0001
E5	0.65796	0.02877	871.76518	522.96	<.0001
<b>G</b> 7	-0.72405	0.09392	99.07639	59.43	<.0001
g1g7	2.10235	0.09142	881.62157	528.87	<.0001
g1g13	1.34874	0.08122	459.63098	275.72	<.0001
g7g13	1.99886	0.09072	809.21150	485.43	<.0001

Bounds on condition number: 2.6436, 77.765

**Stepwise Selection: Step 8** 

**Variable G1 Entered: R-Square = 0.7572 and C(p) = 205.7058** 

Analysis of Variance								
Source DF Sum of Mean Square F Value Pr								
Model	8	9862.42389	1232.80299	776.19	<.0001			
Error	1991	3162.26990	1.58828					
Corrected Total	1999	13025						

**Stepwise Selection: Step 8** 

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	100.37026	0.05749	4841158	3048047	<.0001
E2	0.63812	0.02925	756.12472	476.06	<.0001
E3	1.18804	0.02904	2658.49232	1673.82	<.0001
E5	0.66046	0.02809	878.33630	553.01	<.0001
G1	-0.94165	0.09430	158.38365	99.72	<.0001
G7	-0.94397	0.09428	159.21476	100.24	<.0001
g1g7	2.79159	0.11281	972.57413	612.34	<.0001
g1g13	1.82371	0.09246	617.95835	389.07	<.0001
g7g13	1.75640	0.09182	581.12144	365.88	<.0001

Bounds on condition number: 3.1024, 127.43

**Stepwise Selection: Step 9** 

Variable G13 Entered: R-Square = 0.7792 and C(p) = 9.3312

Analysis of Variance								
Source DF Squares Square F Value Pr > F								
Model	9	10149	1127.68545	780.41	<.0001			
Error	1990	2875.52472	1.44499					
Corrected Total	1999	13025						

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F	
Intercept	101.10880	0.07587	2566581	1776196	<.0001	
E2	0.64330	0.02790	768.30338	531.70	<.0001	
E3	1.18839	0.02770	2660.08208	1840.90	<.0001	
E5	0.66495	0.02679	890.19625	616.06	<.0001	
G1	-1.43914	0.09663	320.53046	221.82	<.0001	
G7	-1.44342	0.09667	322.18521	222.97	<.0001	
G13	-1.33511	0.09478	286.74518	198.44	<.0001	
g1g7	2.82304	0.10763	994.18036	688.02	<.0001	
g1g13	2.70007	0.10792	904.46106	625.93	<.0001	
g7g13	2.64336	0.10787	867.76306	600.53	<.0001	

**Stepwise Selection: Step 9** 

Bounds on condition number: 3.2308, 198.26

All variables left in the model are significant at the 0.0100 level.

No other variable met the 0.0100 significance level for entry into the model.

Summary of Stepwise Selection								
Step	Variable Entered	Variable Removed	Number Vars In	Partial R-Square	Model R-Square	C(p)	F Value	Pr > F
1	g1g13		1	0.2465	0.2465	4793.41	653.68	<.0001
2	E3		2	0.1877	0.4342	3104.30	662.41	<.0001
3	g1g7		3	0.1152	0.5494	2068.48	510.16	<.0001
4	E5		4	0.0660	0.6153	1476.11	342.10	<.0001
5	g7g13		5	0.0648	0.6802	893.830	404.28	<.0001
6	E2		6	0.0573	0.7374	379.821	434.69	<.0001
7	G7		7	0.0076	0.7450	313.278	59.43	<.0001
8	G1		8	0.0122	0.7572	205.706	99.72	<.0001
9	G13		9	0.0220	0.7792	9.3312	198.44	<.0001

