Using Stepwise Regression to find the best model

The REG Procedure
Model: Stepwise
Dependent Variable: Weekly_Sales

Number of Observations Read	421570
Number of Observations Used	421570

Stepwise Selection: Step 1

Variable Size Entered: R-Square = 0.0595 and C(p) = 763.3252

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1.292752E13	1.292752E13	26647.3	<.0001
Error	421568	2.045169E14	485133747		
Corrected Total	421569	2.174444E14			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3565.05101	83.28298	8.889565E11	1832.39	<.0001
Size	0.09081	0.00055629	1.292752E13	26647.3	<.0001

Bounds on condition number: 1, 1

Stepwise Selection: Step 2

Variable MarkDown3 Entered: R-Square = 0.0604 and C(p) = 350.9954

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1.312817E13	6.564083E12	13543.7	<.0001
Error	421567	2.043162E14	484658952		
Corrected Total	421569	2.174444E14			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3558.67759	83.24280	8.857683E11	1827.61	<.0001
MarkDown3	0.12485	0.00614	2.00643E11	413.99	<.0001
Size	0.09043	0.00055634	1.280482E13	26420.3	<.0001

Bounds on condition number: 1.0011, 4.0045

Stepwise Selection: Step 3

Variable CPI Entered: R-Square = 0.0608 and C(p) = 174.4693

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1.321462E13	4.404873E12	9092.43	<.0001
Error	421566	2.042298E14	484455026		
Corrected Total	421569	2.174444E14			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	5541.94749	170.19920	5.136452E11	1060.25	<.0001

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
MarkDown3	0.12438	0.00613	1.991298E11	411.04	<.0001
Size	0.09041	0.00055622	1.279813E13	26417.6	<.0001
CPI	-11.56459	0.86570	86452891478	178.45	<.0001

Bounds on condition number: 1.0012, 9.0071

Stepwise Selection: Step 4

Variable Unemployment Entered: R-Square = 0.0610 and C(p) = 68.7633

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	1.326678E13	3.316694E12	6847.97	<.0001
Error	421565	2.041776E14	484332452		
Corrected Total	421569	2.174444E14			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	7664.49342	266.07416	4.01888E11	829.78	<.0001
MarkDown3	0.12321	0.00614	1.953292E11	403.30	<.0001
Size	0.08999	0.00055760	1.261495E13	26046.0	<.0001
CPI	-14.39998	0.90769	1.21897E11	251.68	<.0001
Unemployment	-198.44292	19.12267	52157622983	107.69	<.0001

Bounds on condition number: 1.1051, 16.85

Stepwise Selection: Step 5

Variable MarkDown5 Entered: R-Square = 0.0612 and C(p) = 4.1399

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	1.329904E13	2.659808E12	5492.55	<.0001
Error	421564	2.041453E14	484257069		
Corrected Total	421569	2.174444E14			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	7575.83496	266.27508	3.919908E11	809.47	<.0001
MarkDown3	0.12137	0.00614	1.892871E11	390.88	<.0001
MarkDown5	0.06704	0.00821	32263023132	66.62	<.0001
Size	0.08932	0.00056360	1.216224E13	25115.3	<.0001
CPI	-14.68218	0.90828	1.265378E11	261.30	<.0001
Unemployment	-183.59242	19.20754	44242719924	91.36	<.0001

Bounds on condition number: 1.1151, 26.436

All variables left in the model are significant at the 0.1500 level.

No other variable met the 0.1500 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	Size		1	0.0595	0.0595	763.325	26647.3	<.0001

Summary of Stepwise Selection								
Step	Variable Entered	Variable Removed	Number Vars In	Partial R-Square	Model R-Square	C(p)	F Value	Pr > F
2	MarkDown3		2	0.0009	0.0604	350.995	413.99	<.0001
3	CPI		3	0.0004	0.0608	174.469	178.45	<.0001
4	Unemployment		4	0.0002	0.0610	68.7633	107.69	<.0001
5	MarkDown5		5	0.0001	0.0612	4.1399	66.62	<.0001