

Albuquerque housing data
Partial listing of data

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Obs	PRICE	SQFT	AGE	FEATS	NE	CUST	COR	TAX	age_c	tax_c
1	2050	2650	13	7	1	1	0	1639	13	1639
2	2080	2600	*	4	1	1	0	1088	.	1088
3	2150	2664	6	5	1	1	0	1193	6	1193
4	2150	2921	3	6	1	1	0	1635	3	1635
5	1999	2580	4	4	1	1	0	1732	4	1732
6	1900	2580	4	4	1	0	0	1534	4	1534
7	1800	2774	2	4	1	0	0	1765	2	1765
8	1560	1920	1	5	1	1	0	1161	1	1161
9	1450	2150	*	4	1	0	0	*	.	.
10	1449	1710	1	3	1	1	0	1010	1	1010

The GLM Procedure

Class Level Information		
Class	Levels	Values
CUST	2	0 1

Number of Observations Read	117
Number of Observations Used	117

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The GLM Procedure

Dependent Variable: PRICE

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	5176857.66	5176857.66	51.27	<.0001
Error	115	11612089.12	100974.69		
Corrected Total	116	16788946.79			

R-Square	Coeff Var	Root MSE	PRICE Mean
0.308349	29.90069	317.7651	1062.735

Source	DF	Type I SS	Mean Square	F Value	Pr > F
CUST	1	5176857.664	5176857.664	51.27	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
CUST	1	5176857.664	5176857.664	51.27	<.0001

The GENMOD Procedure

Model Information	
Data Set	INTRO.HOUSING
Distribution	Binomial
Link Function	Logit
Dependent Variable	CUST

Number of Observations Read	117
Number of Observations Used	117
Number of Events	90
Number of Trials	117

Response Profile		
Ordered Value	CUST	Total Frequency
1	0	90
2	1	27

PROC GENMOD is modeling the probability that CUST='0'. One way to change this to model the probability that CUST='1' is to specify the DESCENDING option in the PROC statement.

Criteria For Assessing Goodness Of Fit			
Criterion	DF	Value	Value/DF
Log Likelihood		-47.6834	
Full Log Likelihood		-47.6834	
AIC (smaller is better)		99.3669	
AICC (smaller is better)		99.4722	
BIC (smaller is better)		104.8912	

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates							
Parameter	DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept	1	5.7947	1.0561	3.7247	7.8646	30.10	<.0001
SQFT	1	-0.0026	0.0006	-0.0037	-0.0015	21.56	<.0001
Scale	0	1.0000	0.0000	1.0000	1.0000		

Note: The scale parameter was held fixed.

The GLM Procedure

Class Level Information		
Class	Levels	Values
CUST	2	0 1

Number of Observations Read	117
Number of Observations Used	117

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Predicting price from custom build and size

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The GLM Procedure

Dependent Variable: PRICE

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	12291131.57	6145565.78	155.76	<.0001
Error	114	4497815.22	39454.52		
Corrected Total	116	16788946.79			

R-Square	Coeff Var	Root MSE	PRICE Mean
0.732097	18.69061	198.6316	1062.735

Source	DF	Type I SS	Mean Square	F Value	Pr > F
CUST	1	5176857.664	5176857.664	131.21	<.0001
SQFT	1	7114273.901	7114273.901	180.32	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
CUST	1	309216.866	309216.866	7.84	0.0060
SQFT	1	7114273.901	7114273.901	180.32	<.0001