Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
WEIGHT	308	.18	1.10	.6309	.27718
PRICE	308	638	16008	5019.48	3403.116
Valid N (listwise)	308				

Pearson Correlation between a diamond's weight and its price

Correlations

		WEIGHT	PRICE
WEIGHT	Pearson Correlation	1	.945**
	Sig. (2-tailed)		<.001
	N	308	308
PRICE	Pearson Correlation	.945**	1
	Sig. (2-tailed)	<.001	
	N	308	308

**. Correlation is significant at the 0.01 level (2-tailed).

Linear regression diamond's weight and its price

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	WEIGHT[b]	.	Enter

a. Dependent Variable: PRICE

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.945[a]	.893	.892	1117.564

a. Predictors: (Constant), WEIGHT

b. Dependent Variable: PRICE

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3173248722.5	1	3173248722.5	2540.734	<.001[b]
	Residual	382178624.45	306	1248949.753		
	Total	3555427346.9	307			

a. Dependent Variable: PRICE

b. Predictors: (Constant), WEIGHT

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence ...
		B	Std. Error	Beta			Lower Bound
1	(Constant)	-2298.358	158.531		-14.498	<.001	-2610.306
	WEIGHT	11598.884	230.111	.945	50.406	<.001	11146.085

Coefficients[a]

Model		95.0% Confidence ... Upper Bound
1	(Constant)	-1986.410
	WEIGHT	12051.683

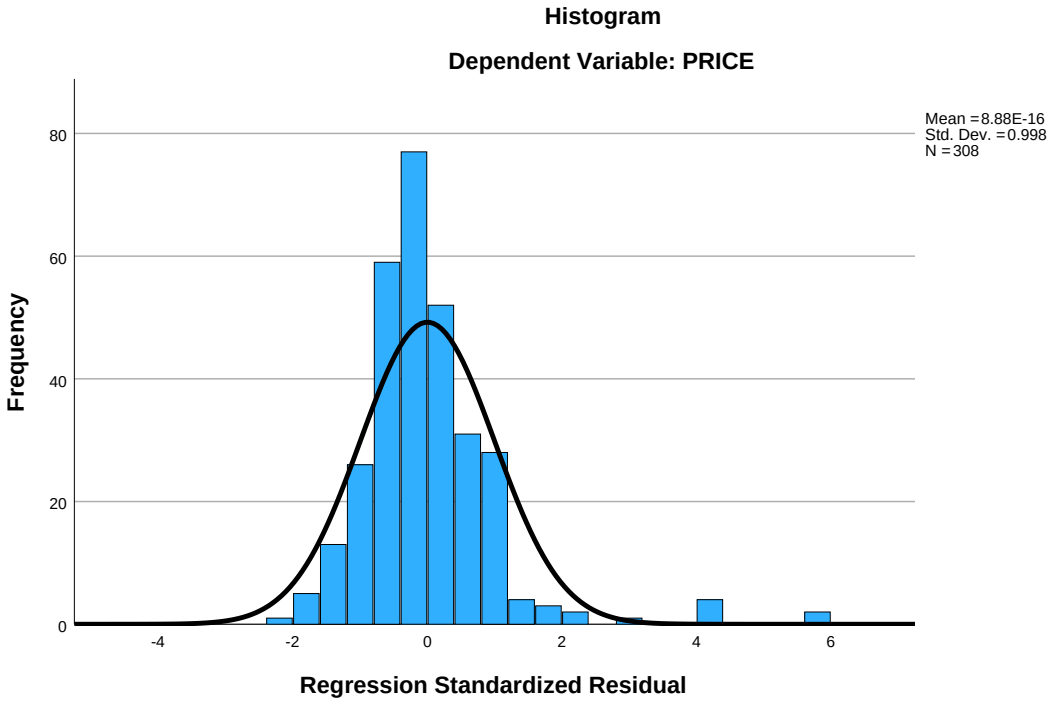
a. Dependent Variable: PRICE

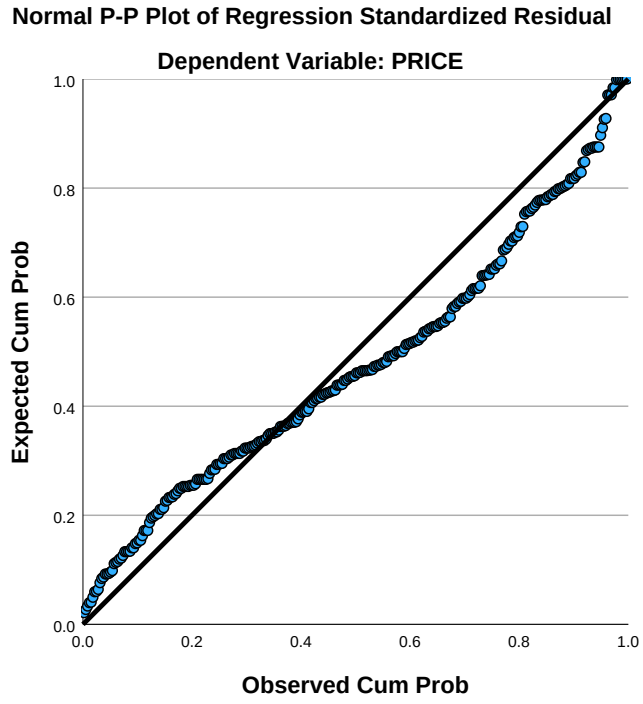
Residuals Statistics[a]

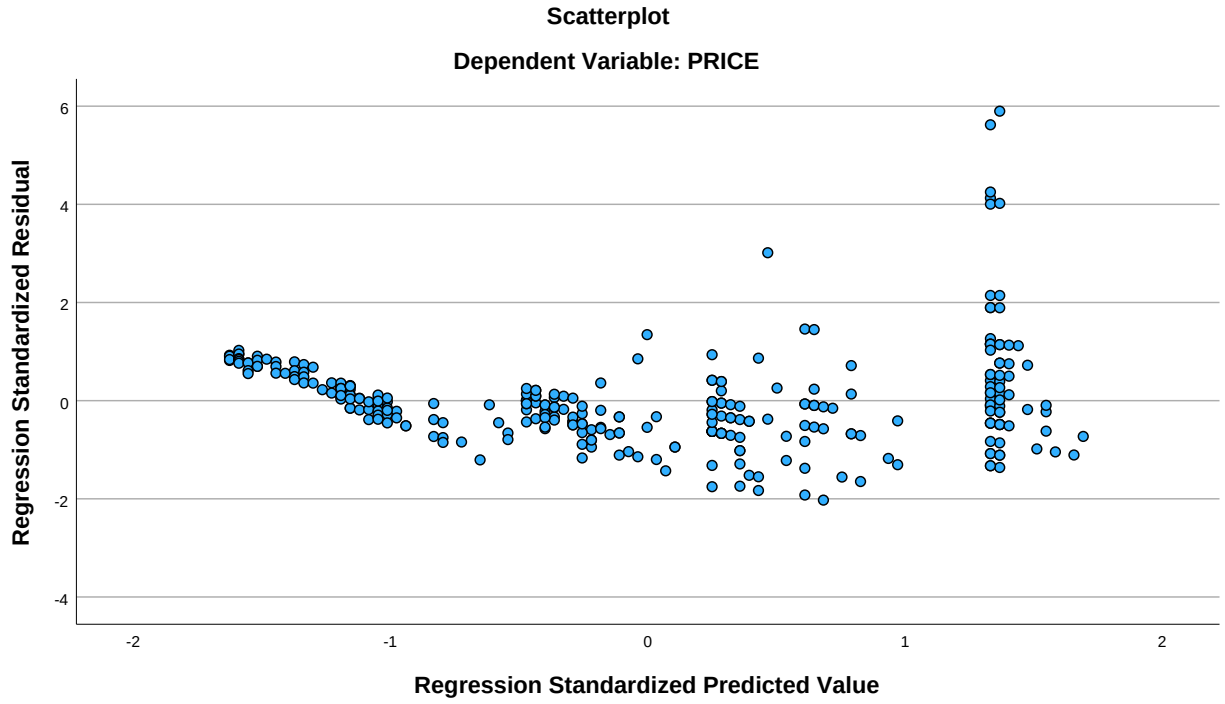
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-210.56	10460.42	5019.48	3215.014	308
Residual	-2264.727	6591.485	.000	1115.743	308
Std. Predicted Value	-1.627	1.692	.000	1.000	308
Std. Residual	-2.026	5.898	.000	.998	308

a. Dependent Variable: PRICE

Charts


Histogram
Dependent Variable: PRICE
Mean = 8.88E-16
Std. Dev. = 0.998
N = 308
Frequency
80
60
40
20
0
-4
-2
0
2
4
6
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PRICE
Expected Cum Prob
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Observed Cum Prob



Scatter plot