



CONSULTANTS

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WORKERS

PERSONALITIES

We build People

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G
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Calibration Graphs

Cement Company

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Data

<i>Sales</i>	<i>VA</i>	<i>Profit</i>	<i>Costs</i>	<i>ROI</i>	<i>MROI</i>	<i>CM</i>	<i>EntF</i>	<i>%VA</i>	<i>%ROI</i>	<i>%Pr</i>	<i>Pr'</i>	<i>CM'</i>
285635278	187755243	138088716	147546562.00	1.94	71330528.36	97880035	1.09	0.66	0.25	0.48	0.41	0.73
241405977	142841064	113779556	127626421.00	1.89	60152932.81	98564913	1.17	0.59	0.25	0.47	0.38	0.61
202565658	124208729	101334468	101231190.00	2.00	50641401.34	78356929	1.22	0.61	0.25	0.50	0.39	0.65
35012079	20275819	14436035	20576044.00	1.70	8483829.00	14736260	1.01	0.58	0.24	0.41	0.37	0.58
16453711	8653787	4733990	11719721.00	1.40	3371947.03	7799924	0.70	0.53	0.20	0.29	0.33	0.43
5473439	2565523	1870302	3603137.00	1.52	1231210.28	2907916	0.98	0.47	0.22	0.34	0.32	0.42
6029209	4686179	3424762	2604447.00	2.31	1479399.89	1343030	1.15	0.78	0.25	0.57	0.44	1.10
4005101	2997158	1374508	2630593.00	1.52	902791.50	1007943	0.62	0.75	0.23	0.34	0.41	0.90

PRr = 0.7479

VCr = 0.9943

BCI = 1.24

VCI = 101

BHI = 11.19

Correlation matrix

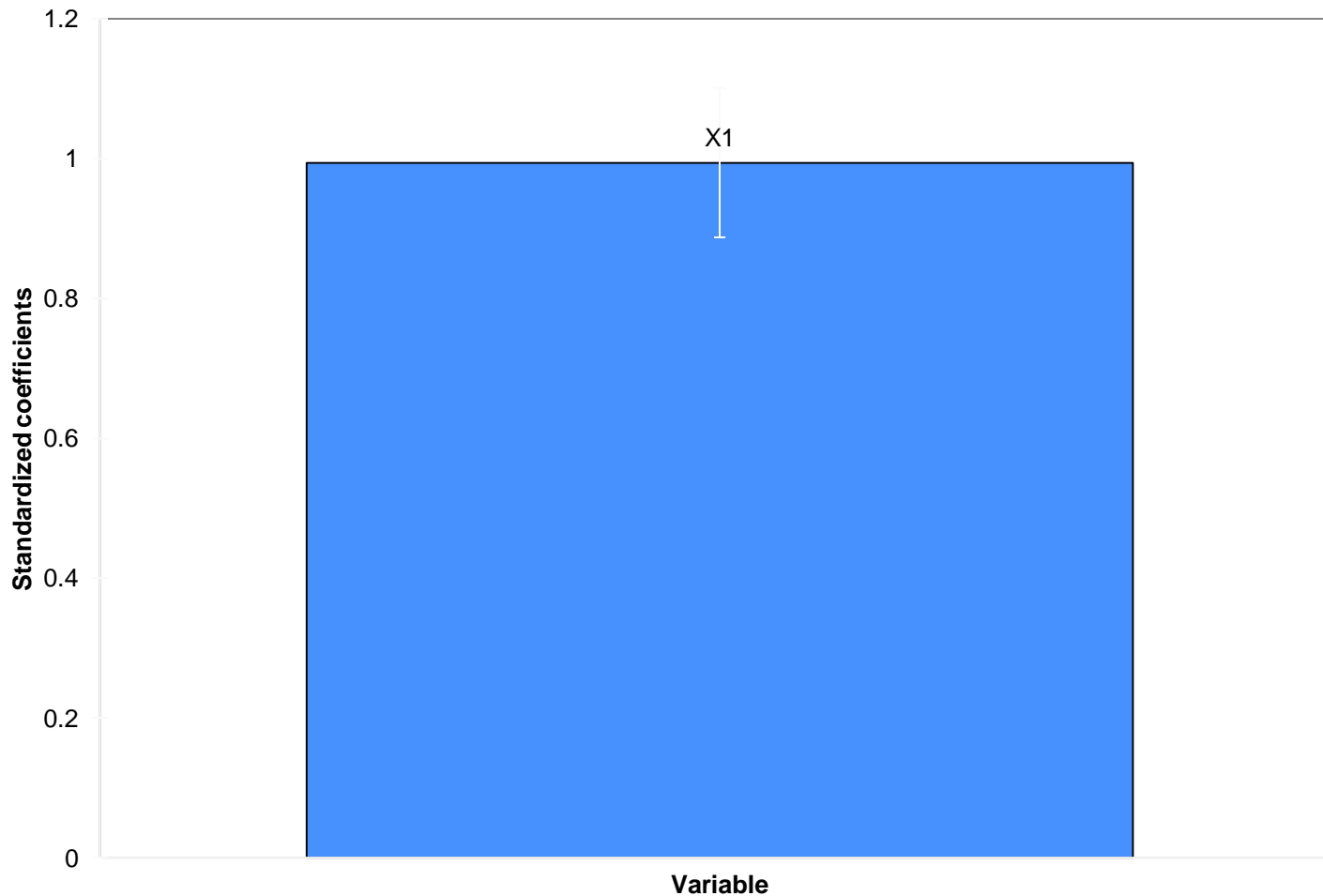
<i>Variables</i>	<i>CM</i>	<i>ROI</i>
<i>CM</i>	1.000	0.994
<i>ROI</i>	0.994	1.000

Goodness of fit statistics

<i>Observations</i>	<i>8.000</i>
<i>Sum of weights</i>	<i>8.000</i>
<i>DF</i>	<i>6.000</i>
<i>R²</i>	<i>0.989</i>
<i>Adjusted R²</i>	<i>0.987</i>
<i>MSE</i>	<i>12353742308143.300</i>
<i>RMSE</i>	<i>3514789.084</i>
<i>MAPE</i>	<i>31.139</i>
<i>DW</i>	<i>2.092</i>
<i>Cp</i>	<i>2.000</i>
<i>AIC</i>	<i>242.858</i>
<i>SBC</i>	<i>243.017</i>
<i>PC</i>	<i>0.019</i>

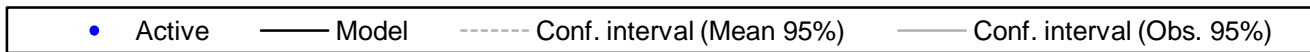
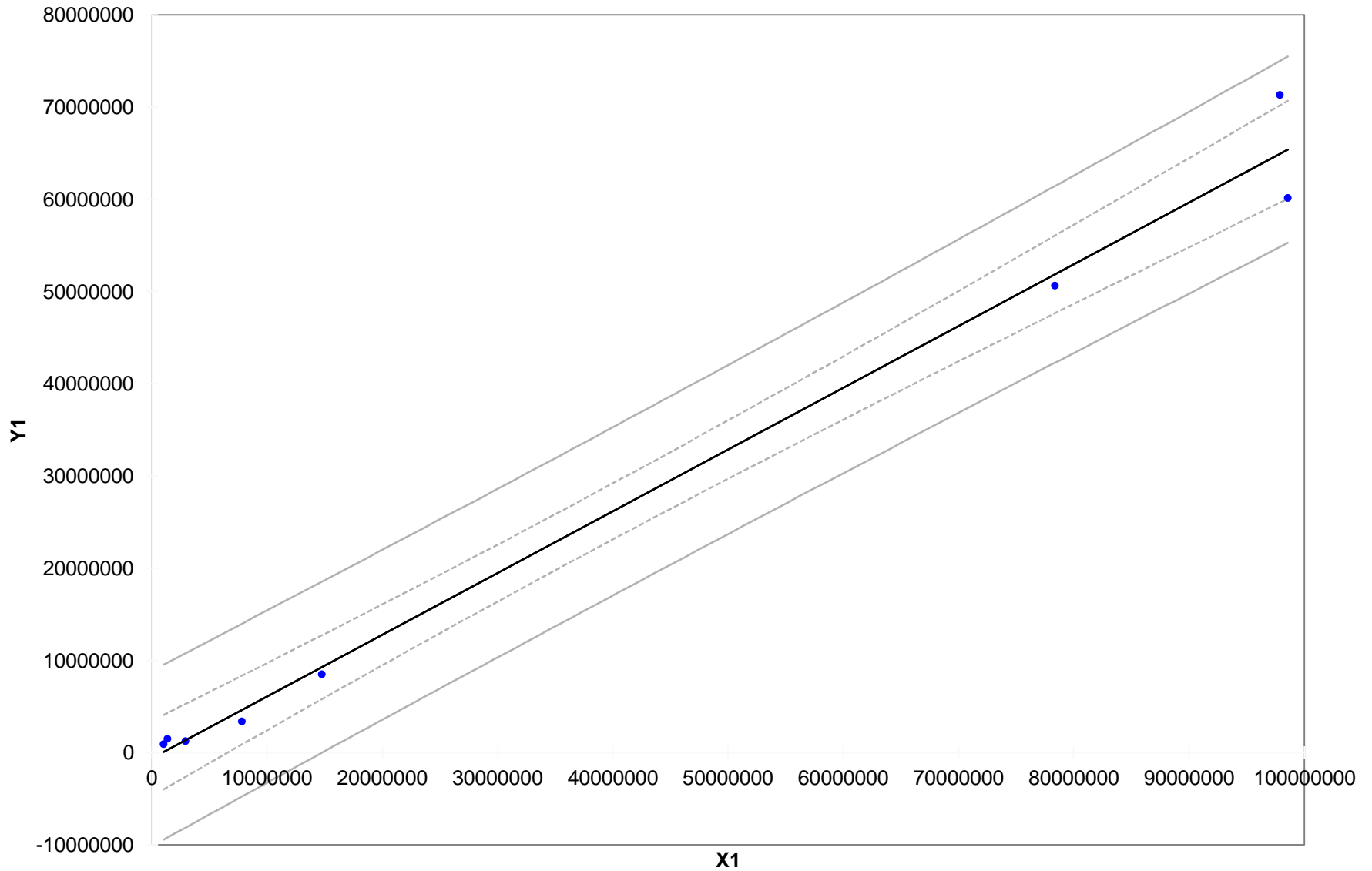
Standardized coefficients

Y1 / Standardized coefficients
(95% conf. interval)

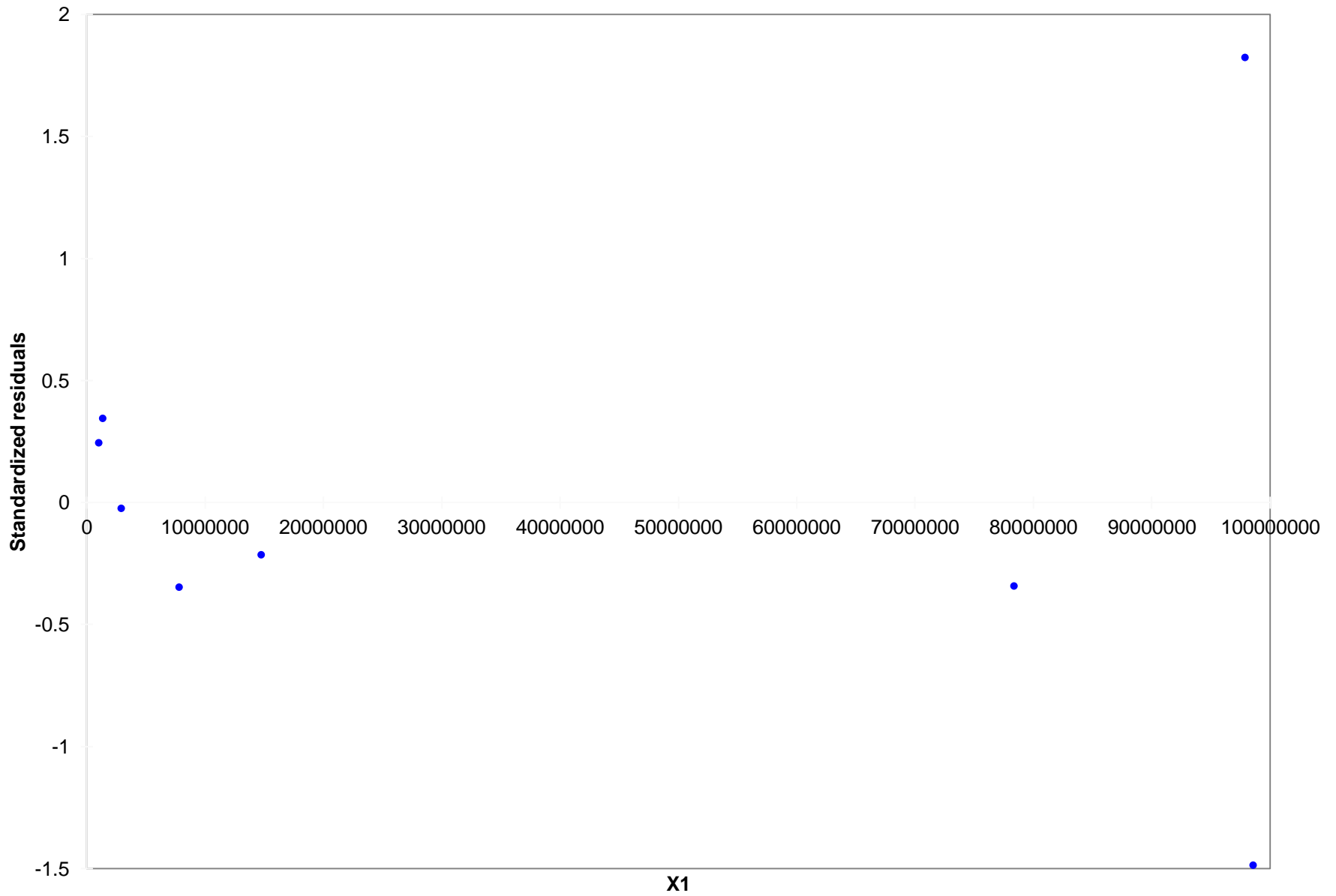


Source CM
Value **0.994**
Standard error **0.044**
t **22.769**
Pr > |t| **0.0001**
Lower bound (95%)
0.887
Upper bound (95%)
1.101

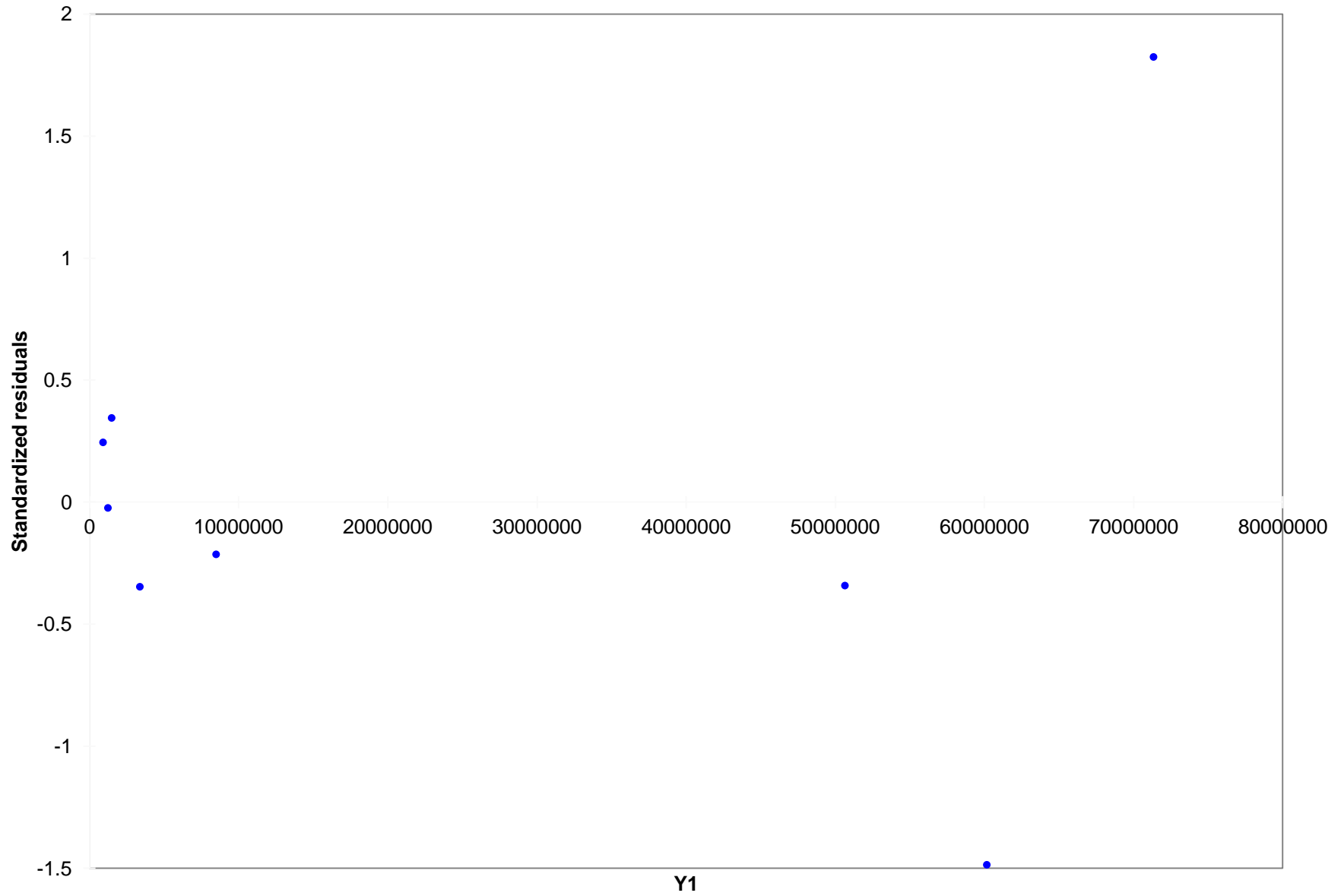
Regression of Y1 by X1 ($R^2=0.989$)



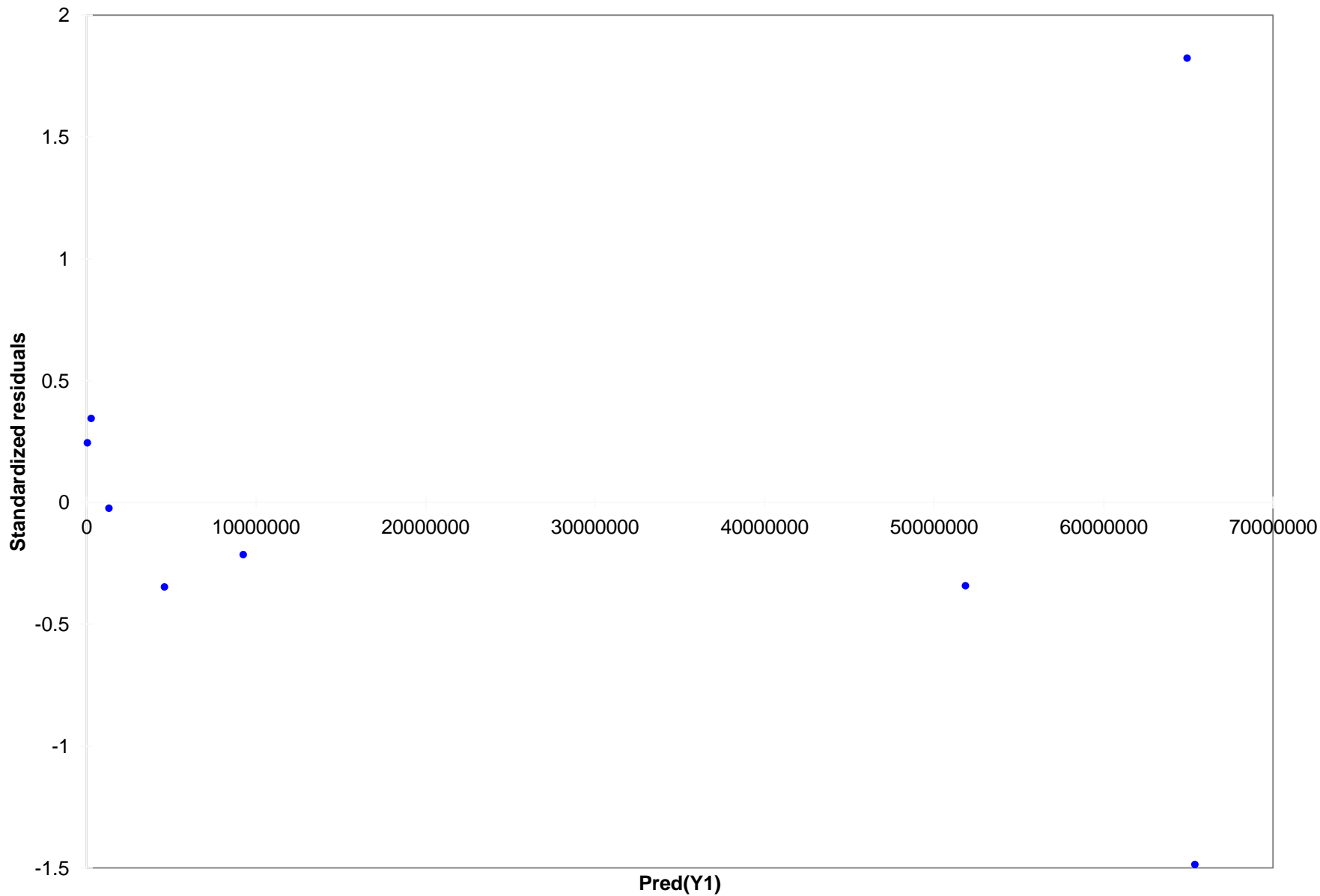
Standardized residuals / X1



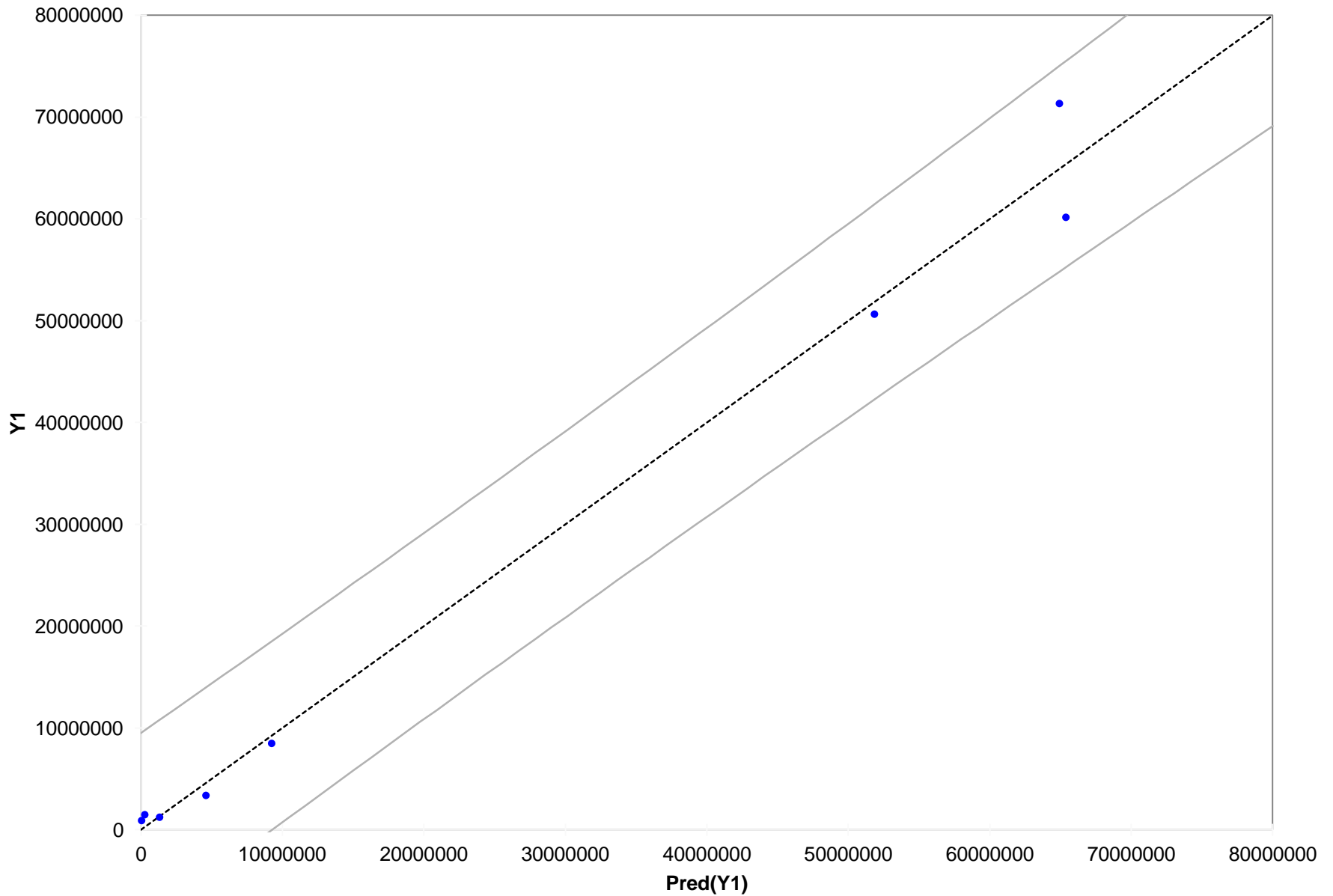
Y1 / Standardized residuals



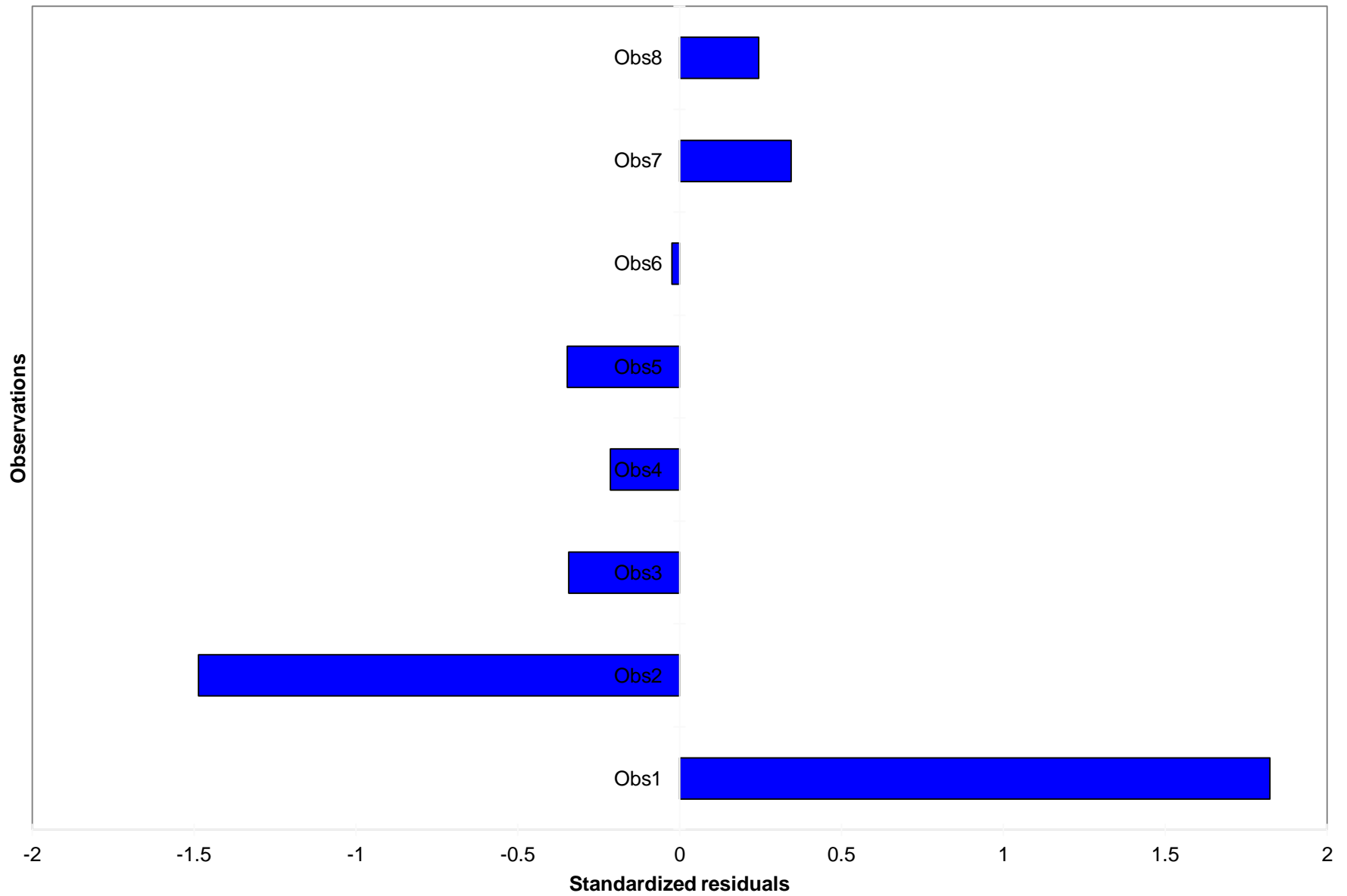
Pred(Y1) / Standardized residuals



Pred(Y1) / Y1

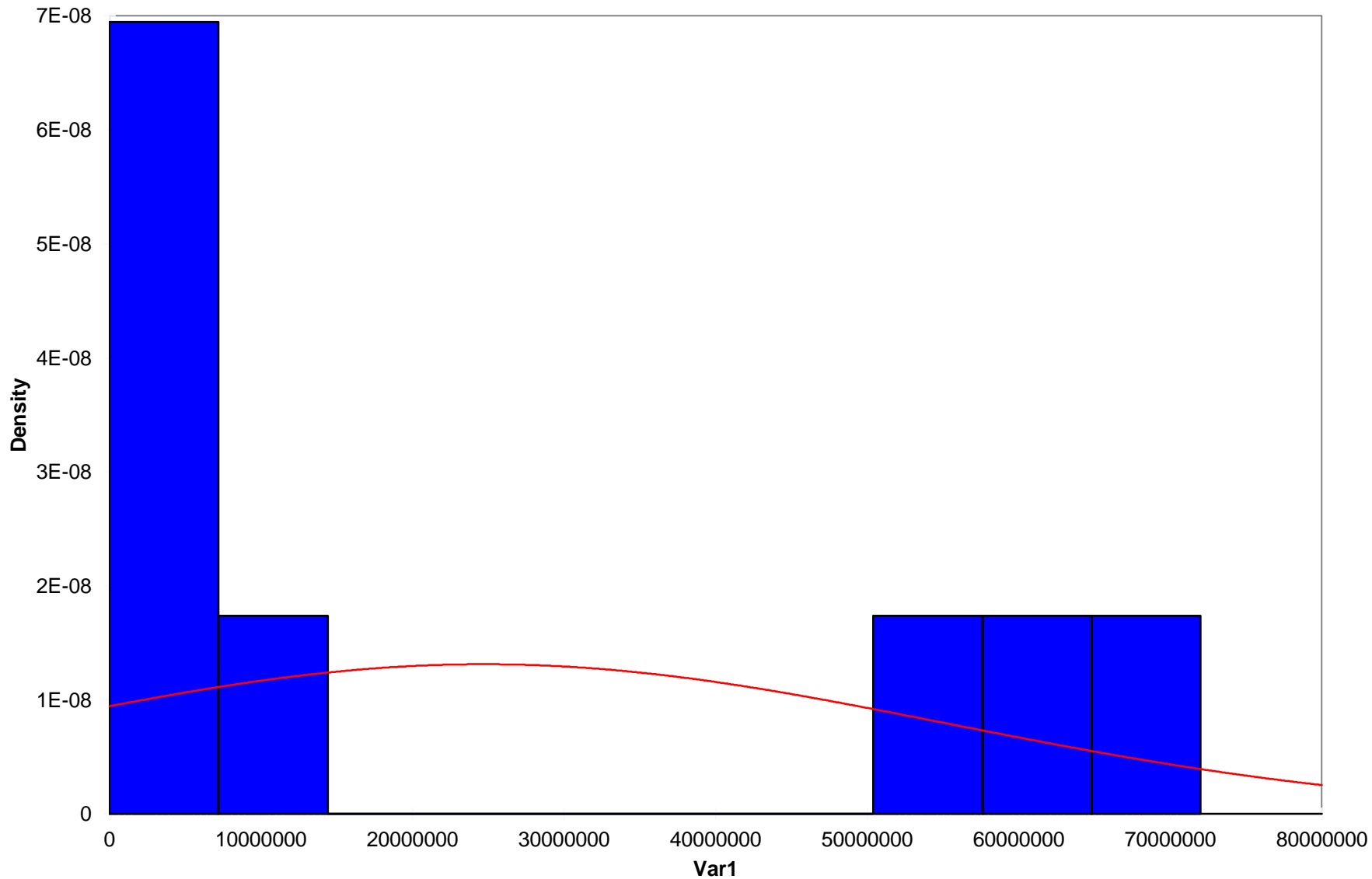


Standardized residuals / Y1



Histograms

Normality Test: ~~ROI~~



— Var1 — Normal(2470E+4,3042E+4)

<i>Statistic</i>	<i>Data</i>	<i>Parameters</i>
Mean	24699255.026	24699255.026
Variance	925487208168736.000	925487208168736.000
Skewness (Pearson)	0.491	0.000
Kurtosis (Pearson)	-1.840	0.000

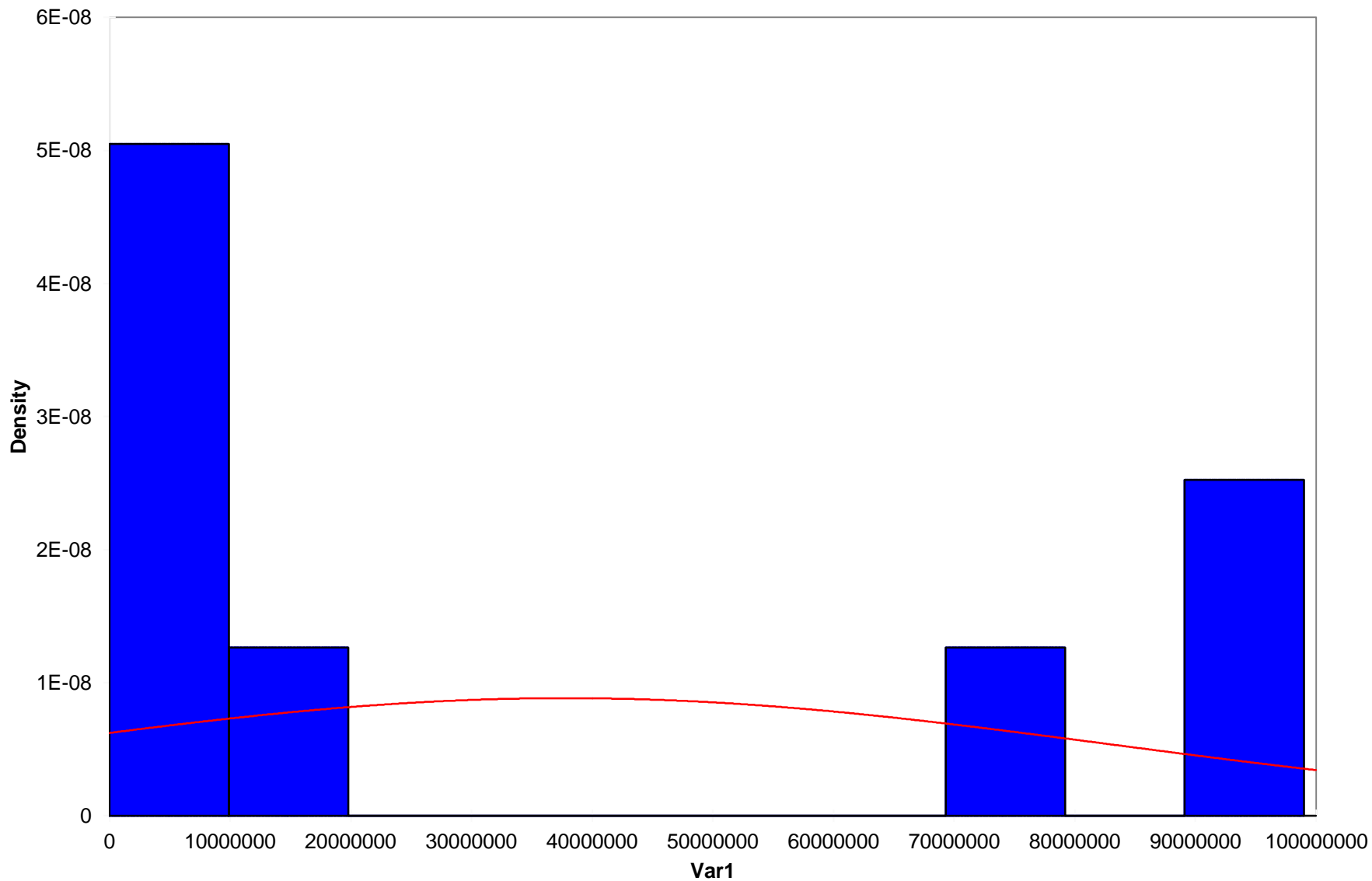
Kolmogorov-Smirnov test: $D = 0.328$; $p\text{-value} = 0.292$; $Alpha = 0.05$

Test interpretation:

- ✚ H_0 : The sample follows a Normal distribution***
- ✚ H_a : The sample does not follow a Normal distribution***
- ✚ As the computed p-value is greater than the significance level $alpha=0.05$, one cannot reject the null hypothesis H_0***
- ✚ The risk to reject the null hypothesis H_0 while it is true is 29.23%***

Histograms

Normality Test: CM



— Var1 — Normal(3782E+4,4516E+4)

<i>Statistic</i>	<i>Data</i>	<i>Parameters</i>
Mean	37824618.750	37824618.750
Variance	2039858458182230.000	2039858458182230.000
Skewness (Pearson)	0.444	0.000
Kurtosis (Pearson)	-1.933	0.000

Kolmogorov-Smirnov test: $D = 0.320$; $p\text{-value} = 0.319$; $Alpha = 0.05$

Test interpretation:

- +* H_0 : The sample follows a Normal distribution**
- +* H_a : The sample does not follow a Normal distribution**
- +* As the computed p-value is greater than the significance level **$alpha=0.05$** , one cannot reject the null hypothesis **H_0****
- +* The risk to reject the null hypothesis H_0 while it is true is **31.88%****

Thank you



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