



CONSULTANTS

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WORKERS

PERSONALITIES

*We build People*

**8 De-Bangler Street Gboko, Nigeria**

[anyebepeter@yahoo.com](mailto:anyebepeter@yahoo.com)

**+234 (0)703-430-2486 / (0)808-080-2046**

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# Calibration Graphs

*Motor Company*

By  
Peter Anyebe

E-Mail: [anyebepeter@yahoo.com](mailto:anyebepeter@yahoo.com)  
GSM: +234 (0)703 430 2486

# 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>
134252	21674	7720	126532.00	1.06	7276.07	112578	0.38	0.16	0.05	0.06	0.09	0.06
136264	22919	8681	127583.00	1.07	8127.96	113345	0.40	0.17	0.06	0.06	0.10	0.07
128954	24503	7149	121805.00	1.06	6752.67	104451	0.31	0.19	0.05	0.06	0.10	0.06
116283	17417	2599	113684.00	1.02	2540.91	98866	0.15	0.15	0.02	0.02	0.06	0.03
143584	16964	14498	129086.00	1.11	13034.10	126620	0.94	0.12	0.09	0.10	0.10	0.10
172455	29868	2452	170003.00	1.01	2417.14	142587	0.08	0.17	0.01	0.01	0.05	0.02
160065	11199	12419	147646.00	1.08	11455.44	148866	1.19	0.07	0.07	0.08	0.07	0.08
177089	32145	2024	175065.00	1.01	2000.87	144944	0.06	0.18	0.01	0.01	0.05	0.01
171646	35794	4853	166793.00	1.03	4715.79	135852	0.14	0.21	0.03	0.03	0.08	0.03
164331	34648	1339	162992.00	1.01	1328.09	129683	0.04	0.21	0.01	0.01	0.04	0.01
162256	37213	1064	161192.00	1.01	1057.02	125043	0.03	0.23	0.01	0.01	0.04	0.01
160504	32156	7419	153085.00	1.05	7076.07	128348	0.24	0.20	0.04	0.05	0.09	0.06

***PRr = 0.8674***

***VCr = 0.6724***

***BCI = 1.1326***

***VCI = 4.0525***

***BHI = 2.1424***

# Correlation matrix

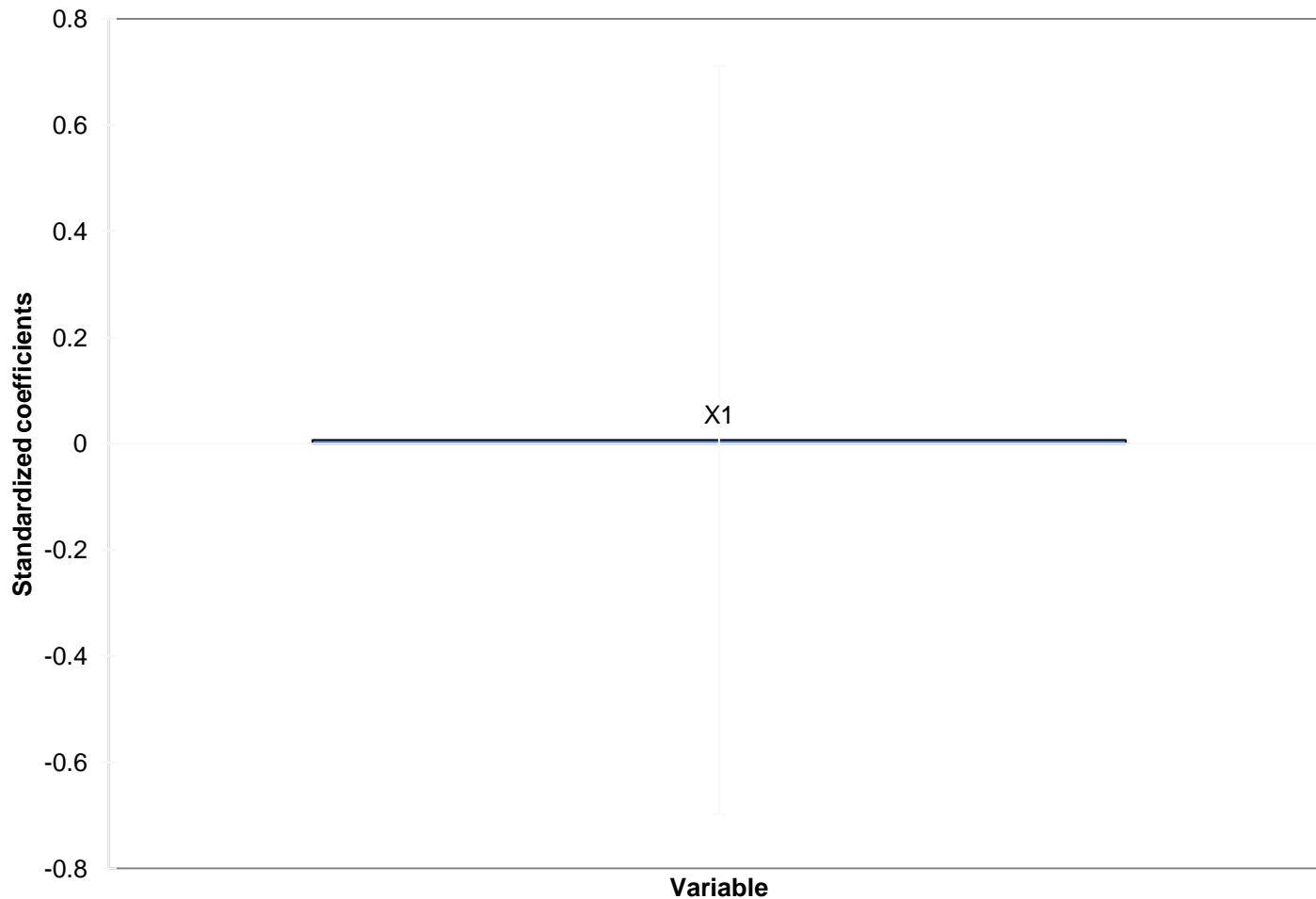
<i>Variables</i>	<i>CM</i>	<del><i>ROI</i></del>
<i>CM</i>	1.000	<i>0.007</i>
<del><i>ROI</i></del>	<i>0.007</i>	1.000

# ***Goodness of fit statistics***

<b><i>Observations</i></b>	<b><i>12.000</i></b>
<b><i>Sum of weights</i></b>	<b><i>12.000</i></b>
<b><i>DF</i></b>	<b><i>10.000</i></b>
<b><i>R<sup>2</sup></i></b>	<b><i>0.000</i></b>
<b><i>Adjusted R<sup>2</sup></i></b>	<b><i>-0.100</i></b>
<b><i>MSE</i></b>	<b><i>17433552.757</i></b>
<b><i>RMSE</i></b>	<b><i>4175.351</i></b>
<b><i>MAPE</i></b>	<b><i>118.067</i></b>
<b><i>DW</i></b>	<b><i>2.688</i></b>
<b><i>Cp</i></b>	<b><i>2.000</i></b>
<b><i>AIC</i></b>	<b><i>201.899</i></b>
<b><i>SBC</i></b>	<b><i>202.869</i></b>
<b><i>PC</i></b>	<b><i>1.400</i></b>

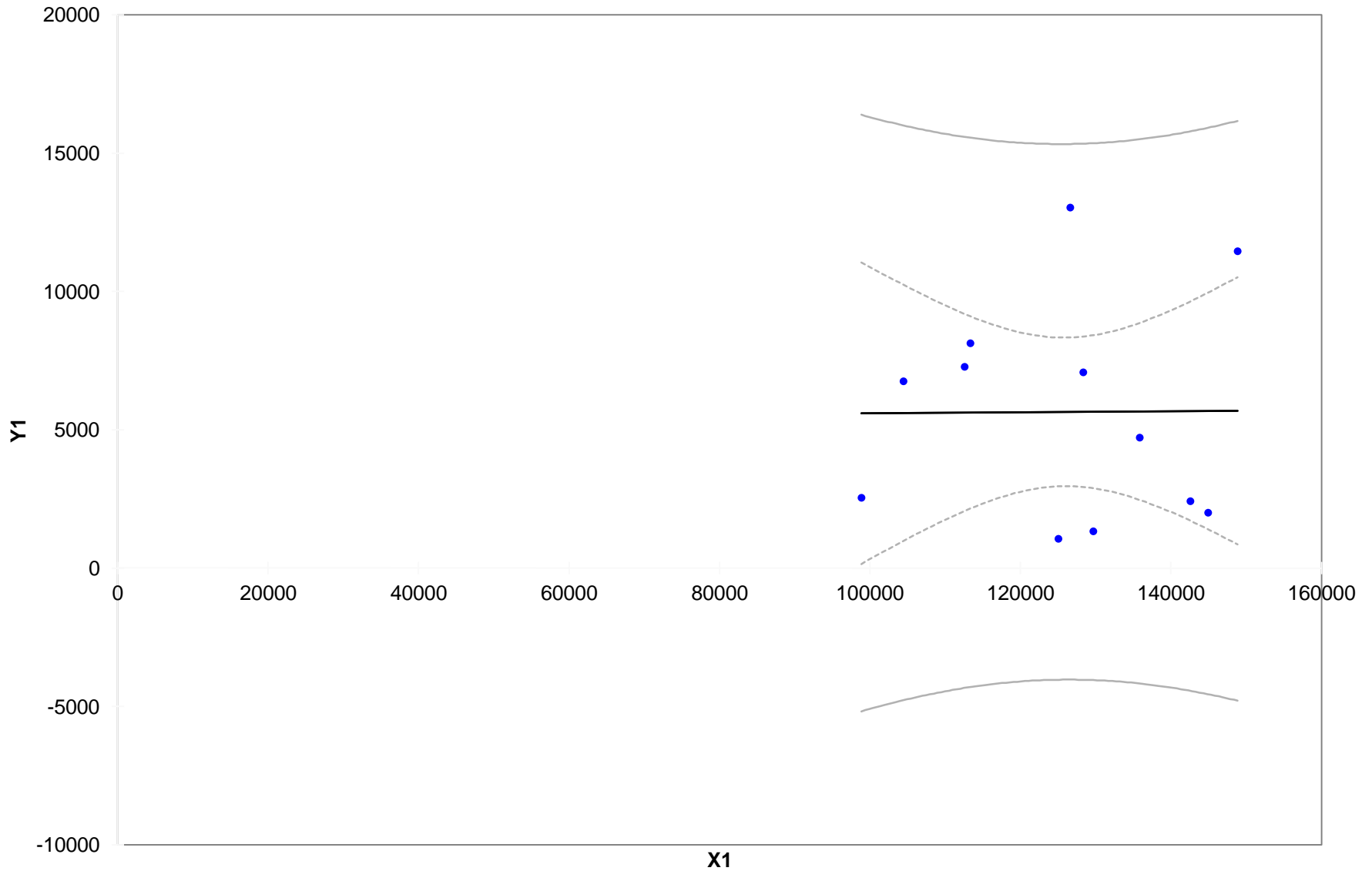
# Standardized coefficients

Y1 / Standardized coefficients  
(95% conf. interval)



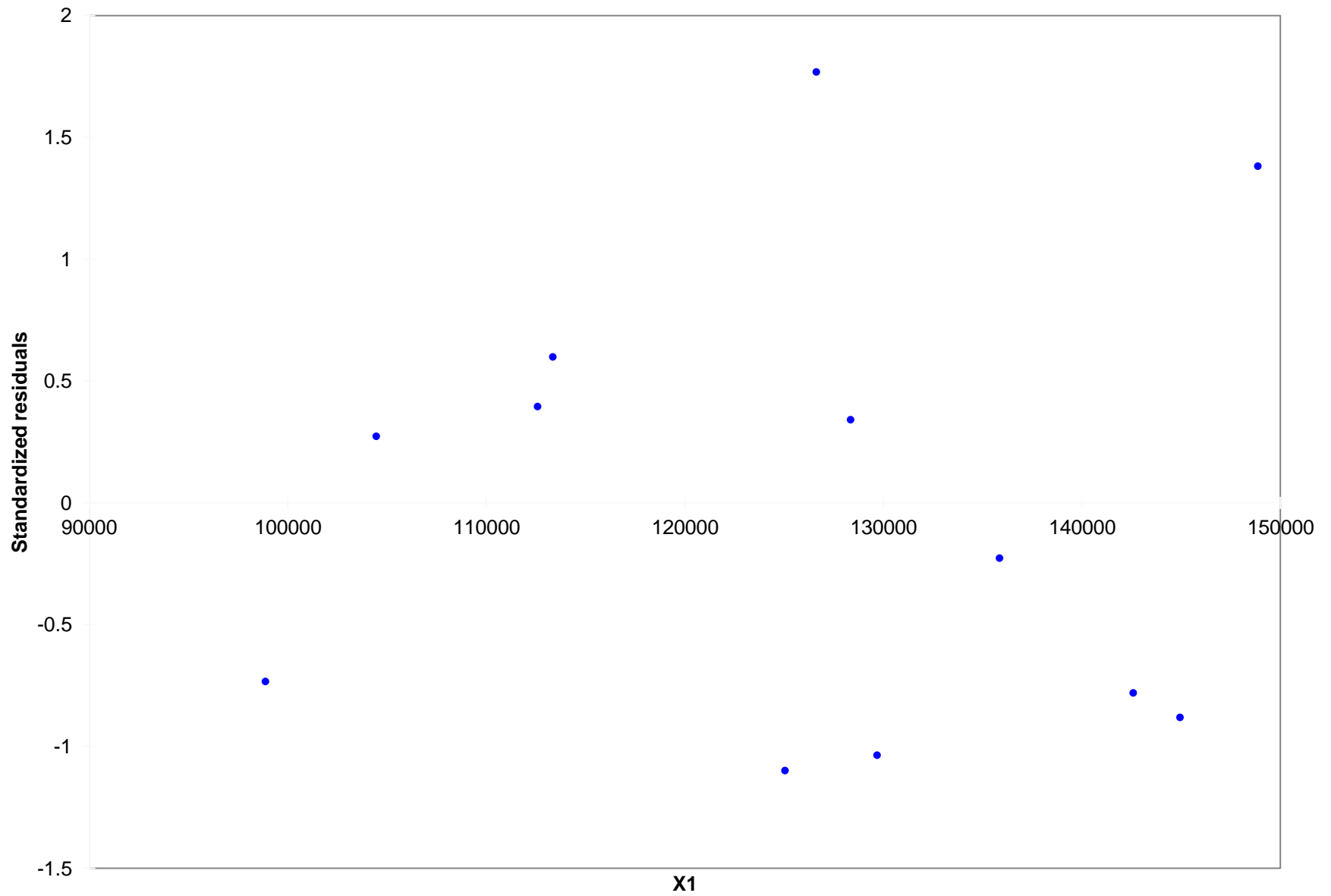
**Source** CM  
**Value** 0.007  
**Standard error** 0.316  
**t** 0.021  
**Pr > |t|** 0.984  
**Lower bound (95%)** -0.698  
**Upper bound (95%)** 0.711

# Regression of Y1 by X1 ( $R^2=0.000$ )



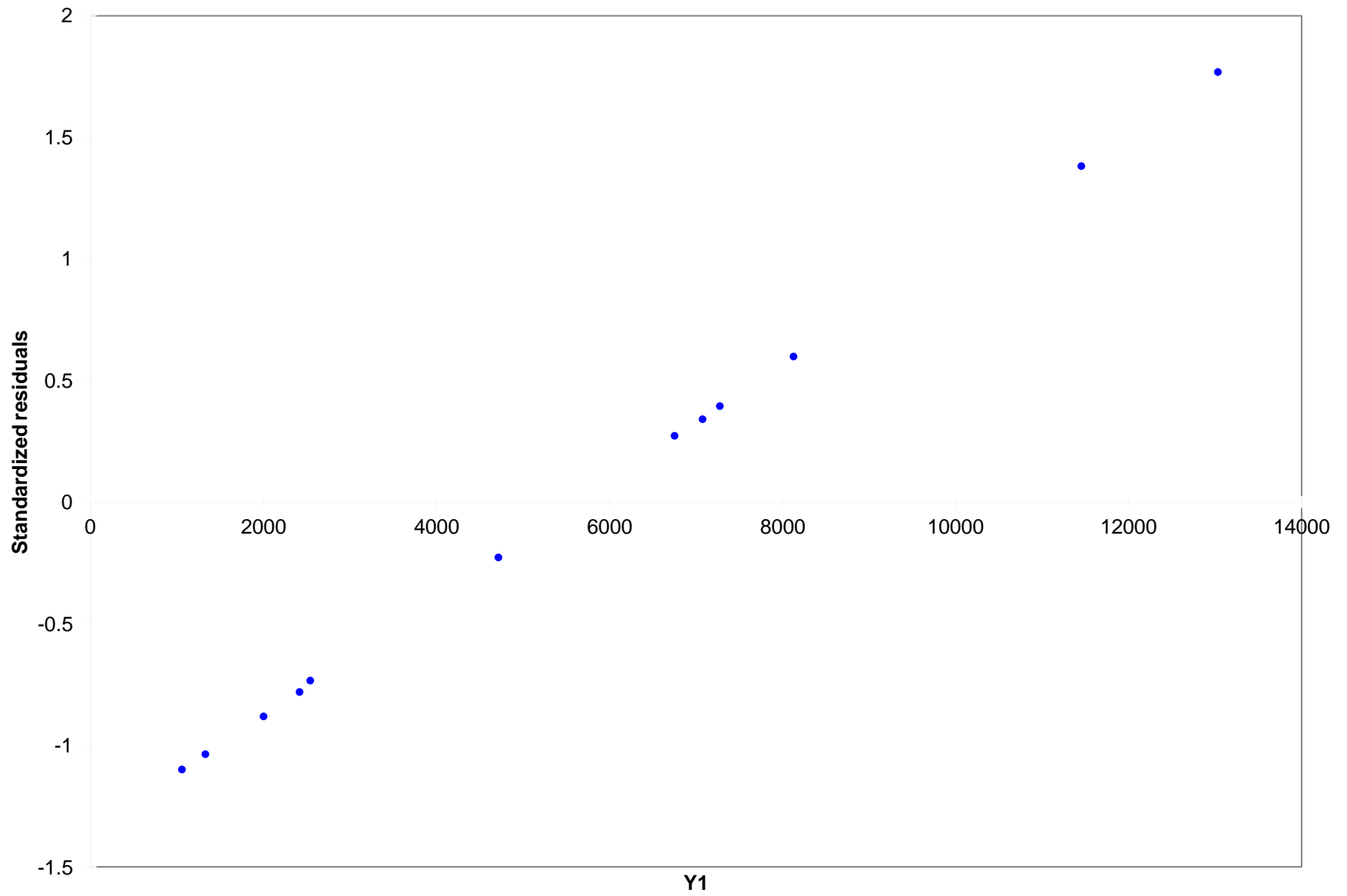
• Active    — Model    - - - - - Conf. interval (Mean 95%)    — Conf. interval (Obs. 95%)

# Standardized residuals / X1

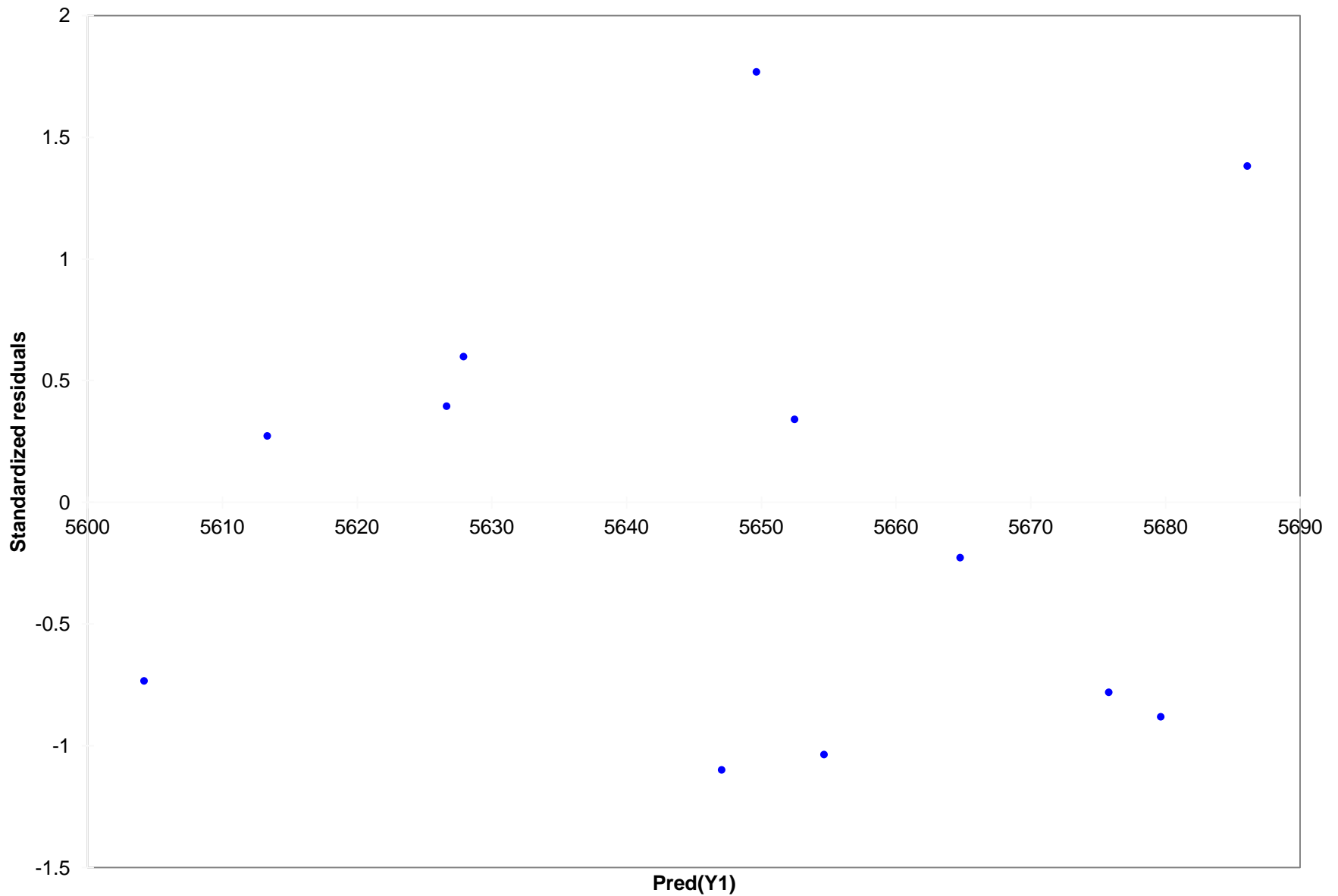




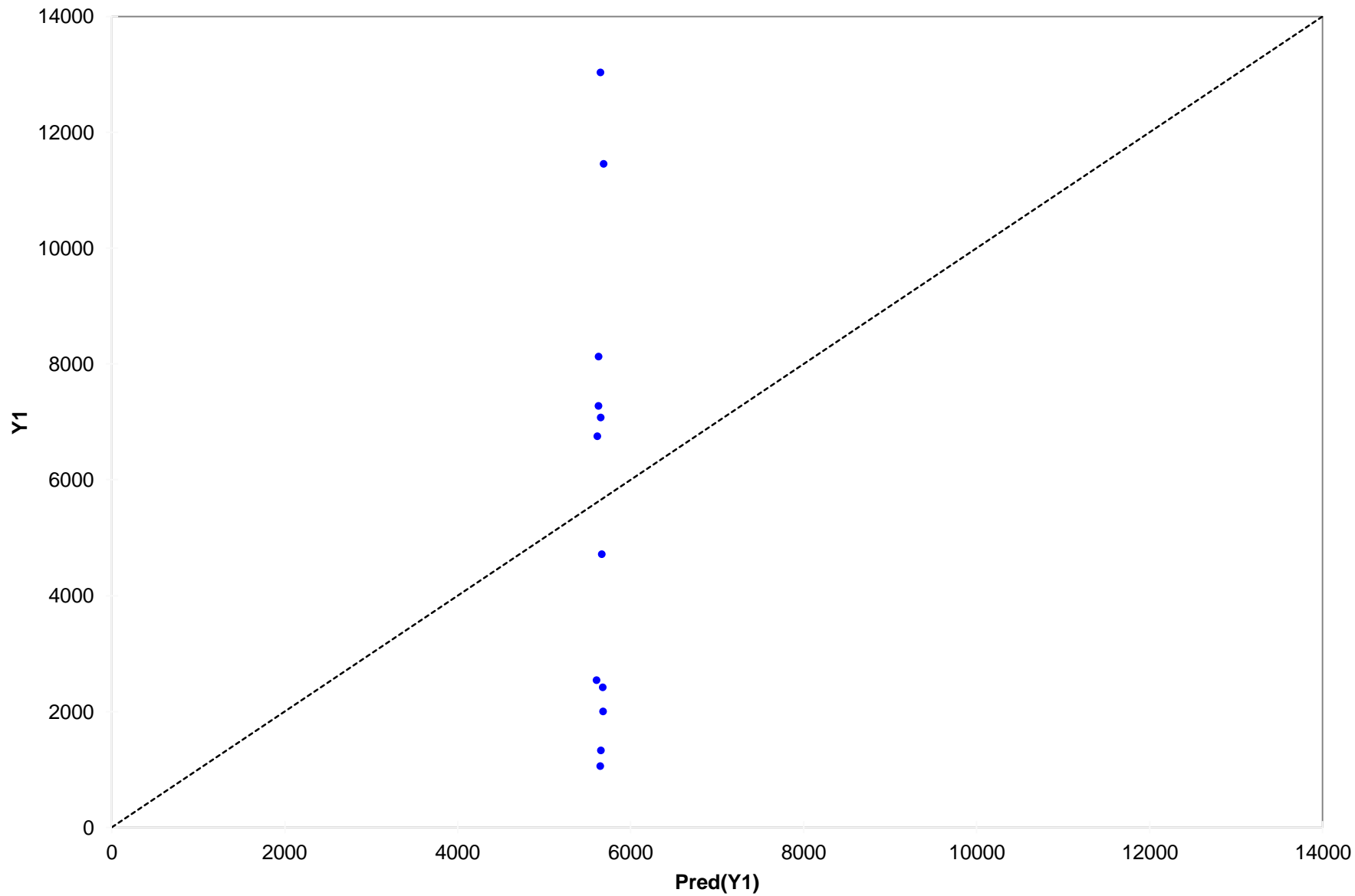
# Y1 / Standardized residuals

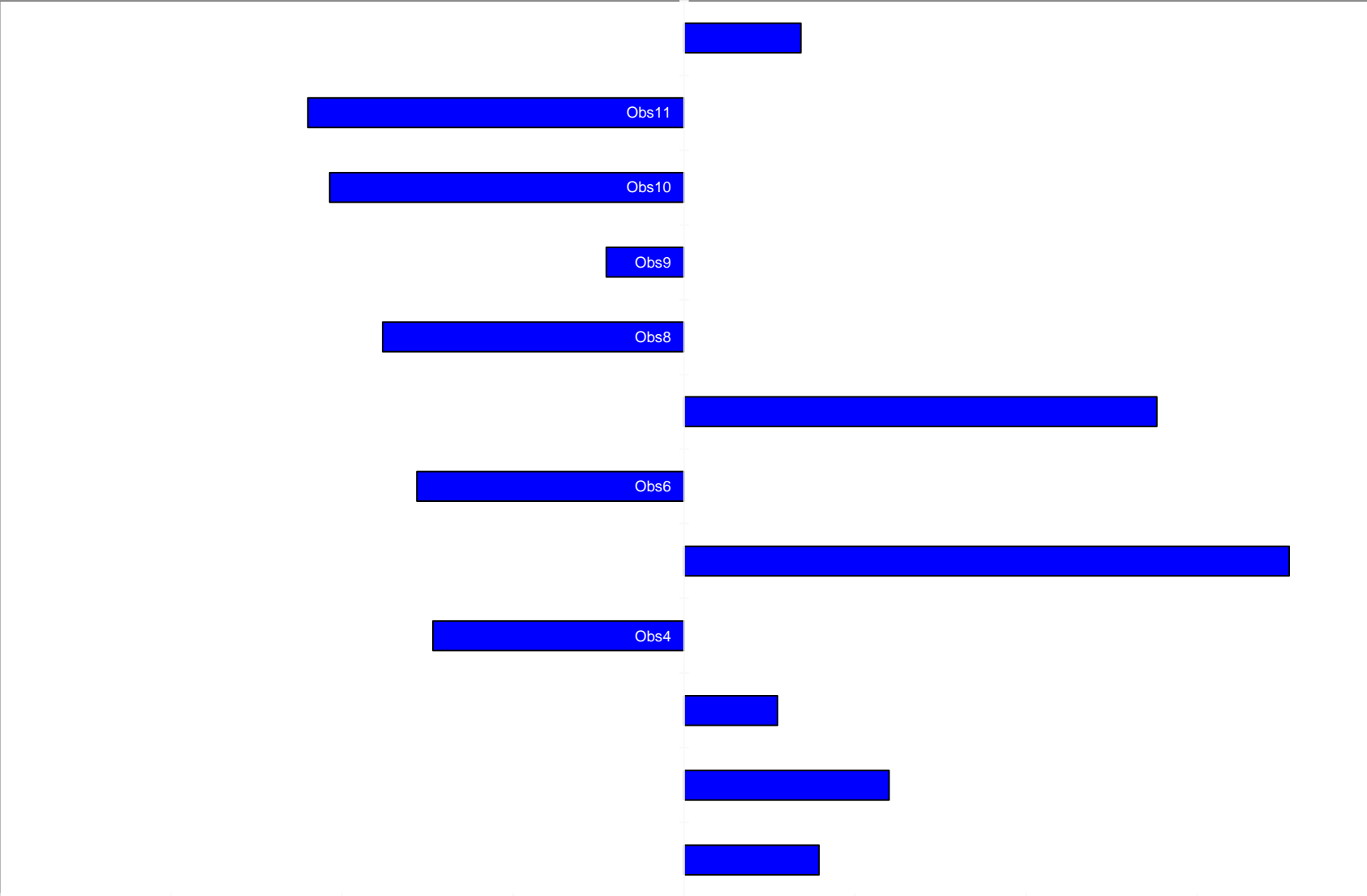


# Pred(Y1) / Standardized residuals



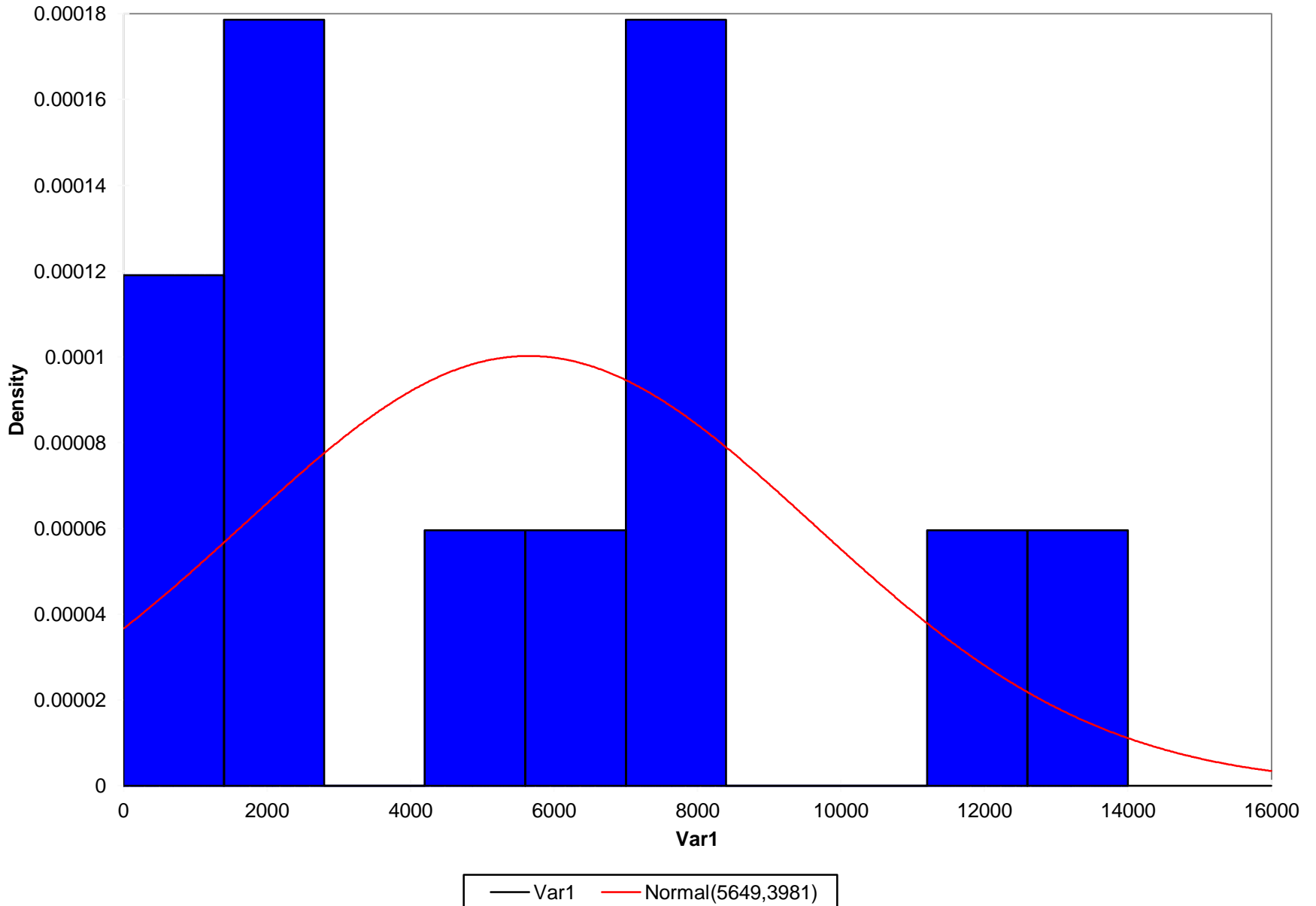
# Pred(Y1) / Y1





# Histograms

Normality Test: ~~ROI~~



<b><i>Statistic</i></b>	<b><i>Data</i></b>	<b><i>Parameters</i></b>
Mean	5648.511	5648.511
Variance	15849370.890	15849370.890
Skewness (Pearson)	0.438	0.000
Kurtosis (Pearson)	-0.230	0.000

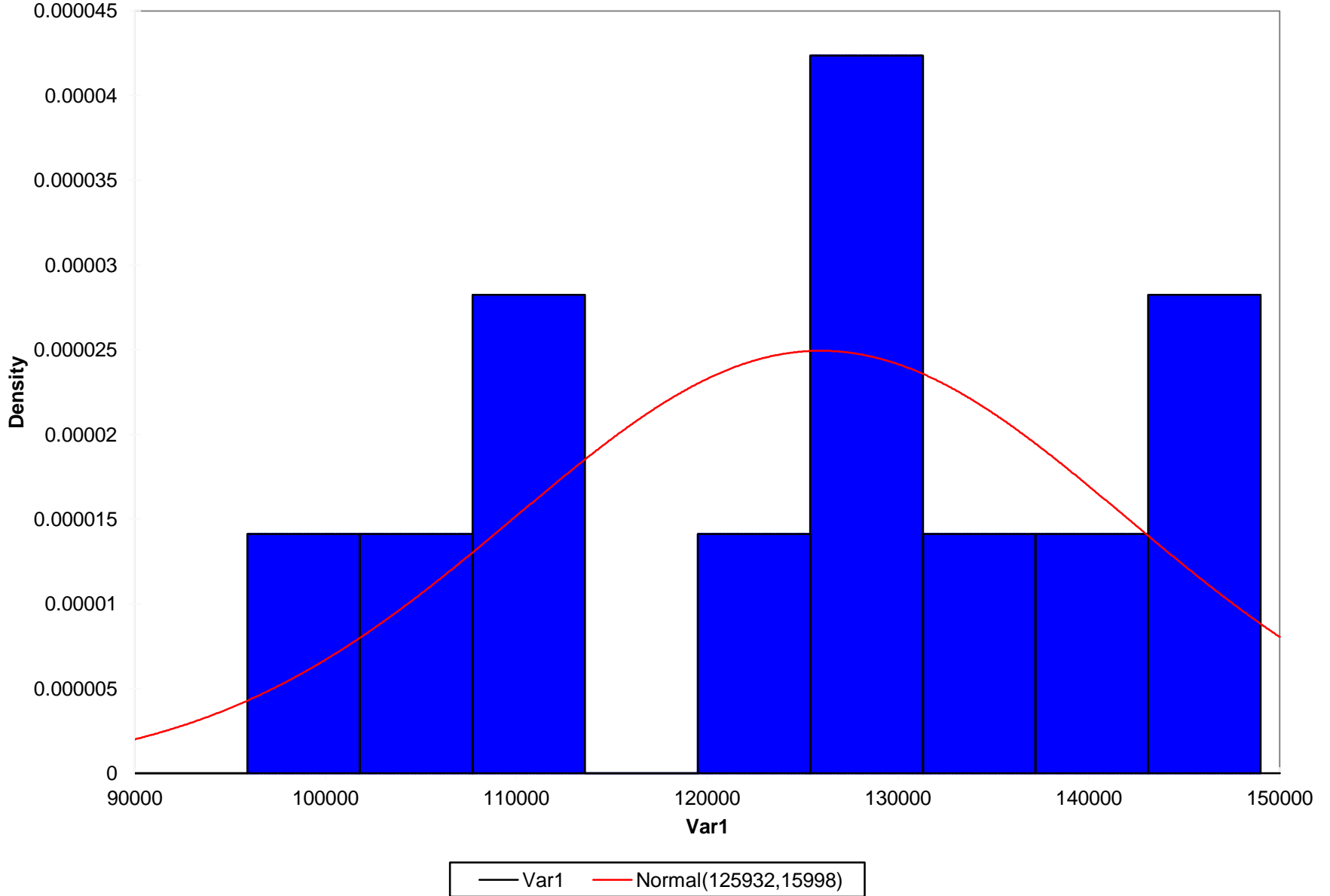
***Kolmogorov-Smirnov test:  $D = 0.199$ ;  $p\text{-value} = 0.678$ ;  $\text{Alpha} = 0.05$***

***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  $67.76\%$***

# Histograms

# Normality Test: CM



<b><i>Statistic</i></b>	<b><i>Data</i></b>	<b><i>Parameters</i></b>
Mean	125931.917	125931.917
Variance	255923113.538	255923113.538
Skewness (Pearson)	0.194	0.000
Kurtosis (Pearson)	-0.345	0.000

***Kolmogorov-Smirnov test:  $D = 0.145$ ; p-value = 0.948; Alpha = 0.05***

***Test interpretation:***

- ✚ ***H0:*** The sample follows a Normal distribution
- ✚ ***Ha:*** 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 ***H0***
- ✚ The risk to reject the null hypothesis H0 while it is true is ***94.77%***



# Thank you



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