

# Regression Analysis of All Music Networks

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REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECin

/METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d
AvgPL_d AvgGL_d PL_TpinN PL_TSpinN S_con R_con SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.
```

## Regression

Notes

Output Created	31-MAY-2015 10:26:40
Comments	
Input	Active Dataset      DataSet5

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	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File		91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on cases with no missing values for any variable used.	
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT ECin  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.22
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	Memory Required	17520 bytes	

	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_9	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	Reciprocity		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

3	PL_TpinN	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: ECin

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.308 <sup>a</sup>	.095	.085	.00509835663 9593
2	.392 <sup>b</sup>	.154	.135	.00495821357 6987
3	.475 <sup>c</sup>	.226	.199	.00476990113 4422

a. Predictors: (Constant), R\_con

b. Predictors: (Constant), R\_con, Reciprocity

c. Predictors: (Constant), R\_con, Reciprocity, PL\_TpinN

d. Dependent Variable: ECin



**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	9.356	.003 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.003	90			
2	Regression	.000	2	.000	7.997	.001 <sup>c</sup>
	Residual	.002	88	.000		
	Total	.003	90			
3	Regression	.001	3	.000	8.456	.000 <sup>d</sup>
	Residual	.002	87	.000		
	Total	.003	90			

a. Dependent Variable: ECin

b. Predictors: (Constant), R\_con

c. Predictors: (Constant), R\_con, Reciprocity

d. Predictors: (Constant), R\_con, Reciprocity, PL\_TpinN

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	.058	.015		3.771	.000
	R_con	-4.278	1.399	-.308	-3.059	.003
2	(Constant)	.060	.015		4.022	.000
	R_con	-4.698	1.371	-.339	-3.427	.001
	Reciprocity	.214	.087	.244	2.470	.015
3	(Constant)	.038	.016		2.276	.025
	R_con	-3.399	1.396	-.245	-2.436	.017
	Reciprocity	.308	.090	.352	3.437	.001
	PL_TpinN	.677	.238	.308	2.844	.006

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_con	1.000	1.000
2	(Constant)		
	R_con	.985	1.016
	Reciprocity	.985	1.016
3	(Constant)		
	R_con	.879	1.137
	Reciprocity	.850	1.176
	PL_TpinN	.759	1.317

a. Dependent Variable: ECin

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.155 <sup>b</sup>	-.911	.365	-.097	.354	2.826	.354
	Edges_d	-.060 <sup>b</sup>	-.330	.742	-.035	.315	3.179	.315
	Reciprocity	.244 <sup>b</sup>	2.470	.015	.255	.985	1.016	.985
	Den_d	.101 <sup>b</sup>	.584	.561	.062	.345	2.898	.345
	CC_d	.142 <sup>b</sup>	1.405	.164	.148	.979	1.021	.979
	GD_d	.139 <sup>b</sup>	1.263	.210	.133	.829	1.206	.829
	Tpaths_d	.113 <sup>b</sup>	.960	.340	.102	.733	1.365	.733
	TSpaths_d	-.071 <sup>b</sup>	-.604	.548	-.064	.731	1.367	.731
	AvgPL_d	.117 <sup>b</sup>	1.014	.313	.107	.768	1.302	.768
	AvgGL_d	.065 <sup>b</sup>	.618	.538	.066	.914	1.095	.914
	PL_TpinN	.170 <sup>b</sup>	1.597	.114	.168	.879	1.137	.879
	PL_TSpinN	.150 <sup>b</sup>	1.326	.188	.140	.783	1.277	.783
	S_con	-.111 <sup>b</sup>	-.933	.353	-.099	.726	1.378	.726
	SMSP_d	.129 <sup>b</sup>	1.267	.209	.134	.981	1.019	.981
2	Nodes	-.117 <sup>c</sup>	-.705	.483	-.075	.351	2.852	.346
	Edges_d	-.032 <sup>c</sup>	-.180	.858	-.019	.313	3.192	.310

	Den_d	.083 <sup>c</sup>	.495	.622	.053	.344	2.903	.341
	CC_d	.139 <sup>c</sup>	1.413	.161	.150	.979	1.022	.964
	GD_d	.087 <sup>c</sup>	.792	.430	.085	.793	1.262	.793
	Tpaths_d	-.113 <sup>c</sup>	-.757	.451	-.081	.436	2.295	.436
	TSpaths_d	-.227 <sup>c</sup>	-1.829	.071	-.192	.606	1.649	.606
	AvgPL_d	.027 <sup>c</sup>	.226	.822	.024	.681	1.468	.681
	AvgGL_d	-.007 <sup>c</sup>	-.064	.949	-.007	.840	1.190	.840
	PL_TpinN	.308 <sup>c</sup>	2.844	.006	.292	.759	1.317	.759
	PL_TSpinN	.212 <sup>c</sup>	1.905	.060	.200	.753	1.328	.753
	S_con	-.114 <sup>c</sup>	-.990	.325	-.106	.726	1.378	.719
	SMSP_d	.129 <sup>c</sup>	1.307	.195	.139	.981	1.019	.966
3	Nodes	-.105 <sup>d</sup>	-.659	.512	-.071	.350	2.854	.335
	Edges_d	-.066 <sup>d</sup>	-.386	.700	-.042	.312	3.208	.291
	Den_d	.023 <sup>d</sup>	.144	.886	.015	.339	2.954	.338
	CC_d	.138 <sup>d</sup>	1.453	.150	.155	.979	1.022	.759
	GD_d	.149 <sup>d</sup>	1.386	.169	.148	.765	1.307	.733
	Tpaths_d	-.001 <sup>d</sup>	-.005	.996	-.001	.403	2.483	.403
	TSpaths_d	-.156 <sup>d</sup>	-1.261	.211	-.135	.574	1.741	.574
	AvgPL_d	.140 <sup>d</sup>	1.170	.245	.125	.617	1.621	.617
	AvgGL_d	-.001 <sup>d</sup>	-.010	.992	-.001	.840	1.190	.759
	PL_TSpinN	.174 <sup>d</sup>	1.605	.112	.170	.740	1.352	.736
	S_con	-.082 <sup>d</sup>	-.737	.463	-.079	.718	1.393	.678
	SMSP_d	.130 <sup>d</sup>	1.370	.174	.146	.981	1.019	.759

a. Dependent Variable: ECin

b. Predictors in the Model: (Constant), R\_con

c. Predictors in the Model: (Constant), R\_con, Reciprocity

d. Predictors in the Model: (Constant), R\_con, Reciprocity, PL\_TpinN

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_con	Reciprocity
1	1	1.999	1.000	.00	.00	
	2	.001	57.536	1.00	1.00	
2	1	2.837	1.000	.00	.00	.03
	2	.163	4.177	.00	.00	.97
	3	.001	68.831	1.00	1.00	.01
3	1	3.763	1.000	.00	.00	.01
	2	.212	4.216	.00	.00	.69
	3	.024	12.421	.01	.01	.29
	4	.000	87.120	.99	.99	.01

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions
		PL_TpinN

1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.03
	3	.79
	4	.18

a. Dependent Variable: ECin

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00411434145 6443	.02027253434 0620	.01098901098 9011	.00253237781 1973
Std. Predicted Value	-2.715	3.666	.000	1.000
Standard Error of Predicted Value	.001	.003	.001	.000
Adjusted Predicted Value	.00445063738 1524	.02314901165 6642	.01104077566 6242	.00268917141 9946
Residual	- .00738985976 2043	.01326607074 5885	.00000000000 0000	.00468972901 8940

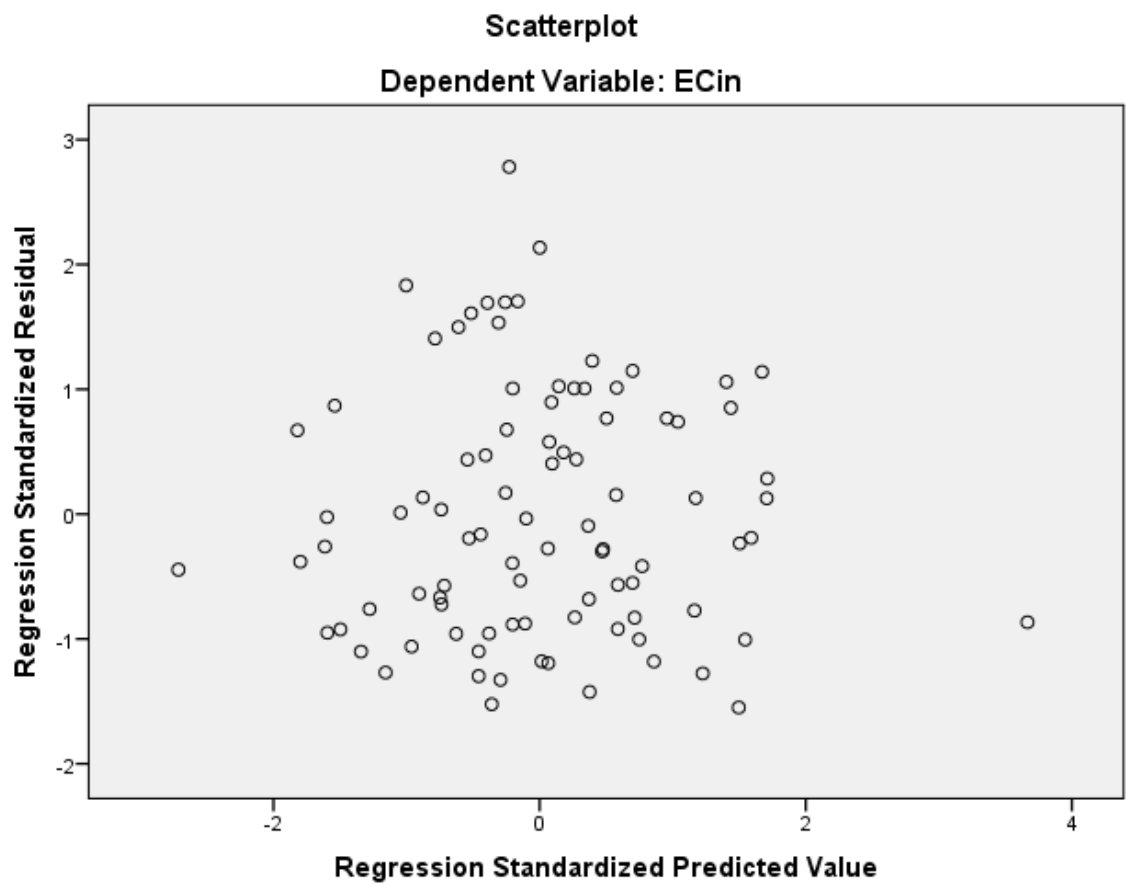
Std. Residual	-1.549	2.781	.000	.983
Stud. Residual	-1.599	2.812	-.005	1.005
Deleted Residual	-	.01356166042	-	.00491093453
	.00787648092	3875	.00005176467	6658
	9554		7231	
Stud. Deleted Residual	-1.614	2.932	-.002	1.013
Mahal. Distance	.008	35.957	2.967	5.041
Cook's Distance	.000	.221	.013	.029
Centered Leverage Value	.000	.400	.033	.056

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECin

## Charts



REGRESSION



/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCinN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpats\_d  
AvgPL\_d AvgGL\_d PL\_TpinN PL\_TSpinN S\_con R\_con SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_EVCinN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID,*ZPRED)  /SAVE COOK.
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Variables Created or Modified	COO_10	Cook's Distance
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**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	CC_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCinN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.273 <sup>a</sup>	.075	.064	.00329229647 0870

a. Predictors: (Constant), CC\_d

b. Dependent Variable: PL\_EVCinN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	7.166	.009 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: PL\_EVCinN

b. Predictors: (Constant), CC\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.010	.000		26.664	.000
	CC_d	.046	.017	.273	2.677	.009

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF

1	(Constant)		
	CC_d	1.000	1.000

a. Dependent Variable: PL\_EVCinN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	-.107 <sup>b</sup>	-1.041	.301	-.110	.981	1.020
	Edges_d	-.092 <sup>b</sup>	-.897	.372	-.095	.985	1.015
	Reciprocity	-.097 <sup>b</sup>	-.946	.347	-.100	1.000	1.000
	Den_d	.131 <sup>b</sup>	1.275	.206	.135	.978	1.022
	GD_d	.070 <sup>b</sup>	.682	.497	.073	.997	1.003
	Tpaths_d	-.025 <sup>b</sup>	-.241	.810	-.026	.988	1.013
	TSpaths_d	-.010 <sup>b</sup>	-.091	.928	-.010	.914	1.095
	AvgPL_d	.044 <sup>b</sup>	.434	.665	.046	1.000	1.000
	AvgGL_d	.100 <sup>b</sup>	.974	.333	.103	.992	1.008
	PL_TpinN	.105 <sup>b</sup>	1.026	.308	.109	.997	1.003
	PL_TSpinN	.057 <sup>b</sup>	.522	.603	.056	.871	1.148
	S_con	-.046 <sup>b</sup>	-.450	.654	-.048	.984	1.017
	R_con	-.044 <sup>b</sup>	-.427	.670	-.046	.979	1.021

SMSP_d	-.541 <sup>b</sup>	-1.762	.082	-.185	.108	9.287
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**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.981
	Edges_d	.985
	Reciprocity	1.000
	Den_d	.978
	GD_d	.997
	Tpaths_d	.988
	TSpaths_d	.914
	AvgPL_d	1.000
	AvgGL_d	.992
	PL_TpinN	.997
	PL_TSpinN	.871
	S_con	.984
	R_con	.979
	SMSP_d	.108

a. Dependent Variable: PL\_EVCinN

b. Predictors in the Model: (Constant), CC\_d

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	CC_d
1	1	1.479	1.000	.26	.26
	2	.521	1.685	.74	.74

a. Dependent Variable: PL\_EVCinN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01048677694 0525	.01780075021 0881	.01098901098 9011	.00092901346 2366
Std. Predicted Value	-.541	7.332	.000	1.000
Standard Error of Predicted Value	.000	.003	.000	.000
Adjusted Predicted Value	.01043260749 4295	.01506885886 1923	.01096959299 3490	.00077795448 3784
Residual	- .00487790768 9661	.02256243117 1536	.00000000000 0000	.00327395484 3639
Std. Residual	-1.482	6.853	.000	.994
Stud. Residual	-1.595	6.899	.002	1.006

Deleted Residual	- .00565138319 5072	.02286860160 5296	.00001941799 5521	.00336296905 0835
Stud. Deleted Residual	-1.609	10.059	.039	1.271
Mahal. Distance	.000	53.762	.989	5.756
Cook's Distance	.000	.566	.016	.071
Centered Leverage Value	.000	.597	.011	.064

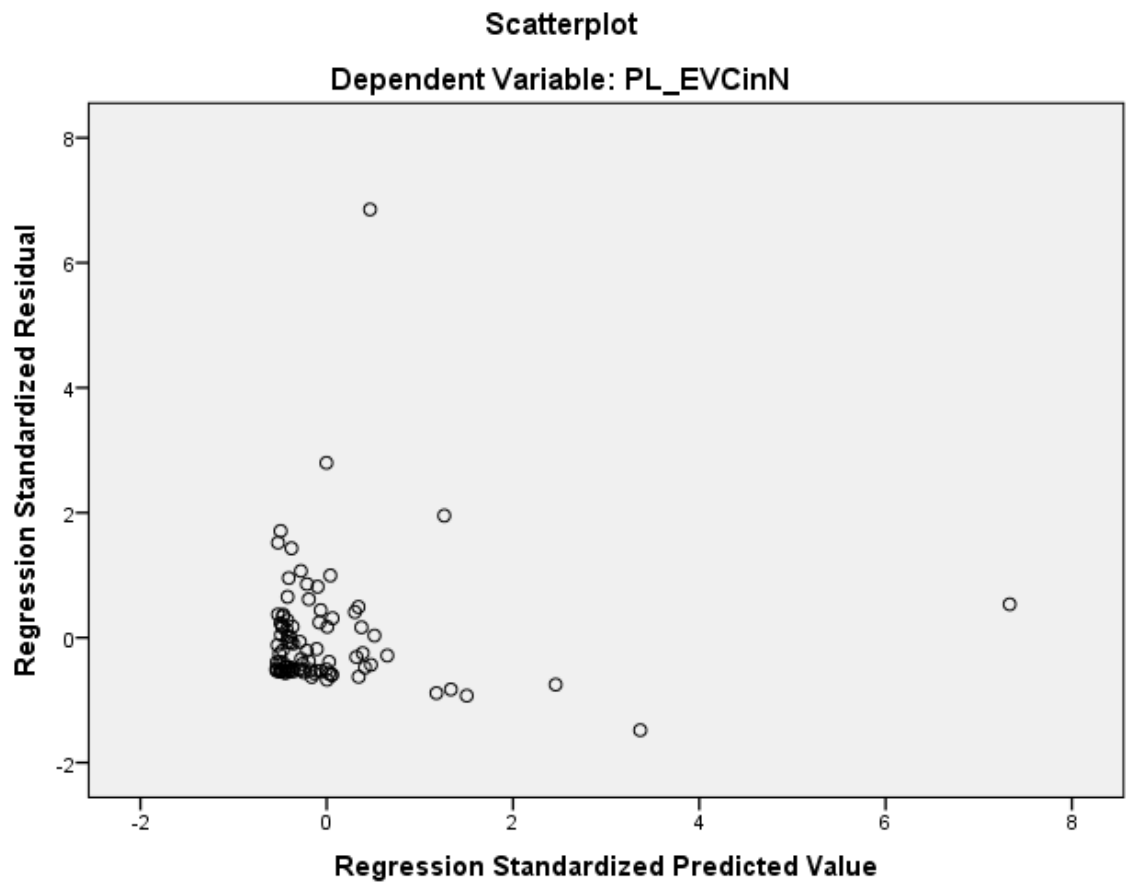
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCinN



## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCin\_TpinN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpaths\_d  
AvgPL\_d AvgGL\_d PL\_TpinN PL\_TSpinN S\_con R\_con SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:27:45
Comments		
Input	Active Dataset	DataSet5
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		<p>REGRESSION</p> <p>/MISSING LISTWISE</p> <p>/STATISTICS COEFF OUTS R ANOVA COLLIN TOL</p> <p>/CRITERIA=PIN(.05) POUT(.10)</p> <p>/NOORIGIN</p> <p>/DEPENDENT EVCin_TpinN</p> <p>/METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d PL_TpinN PL_TSpinN S_con R_con SMSP_d</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.19
	Memory Required	17600 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_11	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCin\_TpinN

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.469 <sup>a</sup>	.220	.211	.00581037392 6536
2	.539 <sup>b</sup>	.290	.274	.00557408866 3898
3	.637 <sup>c</sup>	.406	.385	.00512872368 6104

a. Predictors: (Constant), Tpaths\_d

b. Predictors: (Constant), Tpaths\_d, GD\_d

c. Predictors: (Constant), Tpaths\_d, GD\_d, AvgPL\_d

d. Dependent Variable: EVCin\_TpinN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	25.104	.000 <sup>b</sup>
	Residual	.003	89	.000		
	Total	.004	90			
2	Regression	.001	2	.001	17.991	.000 <sup>c</sup>
	Residual	.003	88	.000		

	Total	.004	90			
3	Regression	.002	3	.001	19.817	.000 <sup>d</sup>
	Residual	.002	87	.000		
	Total	.004	90			

a. Dependent Variable: EVCin\_TpinN

b. Predictors: (Constant), Tpaths\_d

c. Predictors: (Constant), Tpaths\_d, GD\_d

d. Predictors: (Constant), Tpaths\_d, GD\_d, AvgPL\_d

# **Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.002	.002		1.201	.233
	Tpaths_d	.798	.159	.469	5.010	.000
2	(Constant)	.005	.002		2.545	.013
	Tpaths_d	1.331	.237	.783	5.625	.000
	GD_d	-.804	.272	-.411	-2.950	.004
3	(Constant)	.014	.003		4.914	.000
	Tpaths_d	.608	.280	.358	2.175	.032
	GD_d	-3.085	.608	-1.576	-5.072	.000

AvgPL_d	2.212	.537	1.553	4.117	.000
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**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_d	1.000	1.000
2	(Constant)		
	Tpaths_d	.417	2.400
	GD_d	.417	2.400
3	(Constant)		
	Tpaths_d	.252	3.961
	GD_d	.071	14.134
	AvgPL_d	.048	20.832

a. Dependent Variable: EVCin\_TpinN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.043 <sup>b</sup>	-.410	.683	-.044	.787	1.270	.787

	Edges_d	-.070 <sup>b</sup>	-.646	.520	-.069	.742	1.347	.742
	Reciprocity	.003 <sup>b</sup>	.022	.982	.002	.634	1.577	.634
	Den_d	-.015 <sup>b</sup>	-.143	.887	-.015	.761	1.314	.761
	CC_d	.169 <sup>b</sup>	1.813	.073	.190	.988	1.013	.988
	GD_d	-.411 <sup>b</sup>	-2.950	.004	-.300	.417	2.400	.417
	TSpaths_d	-.051 <sup>b</sup>	-.361	.719	-.038	.434	2.305	.434
	AvgPL_d	-.190 <sup>b</sup>	-1.083	.282	-.115	.283	3.537	.283
	AvgGL_d	-.214 <sup>b</sup>	-1.925	.057	-.201	.686	1.458	.686
	PL_TpinN	-.227 <sup>b</sup>	-2.096	.039	-.218	.722	1.385	.722
	PL_TSpinN	-.146 <sup>b</sup>	-1.405	.164	-.148	.803	1.246	.803
	S_con	-.046 <sup>b</sup>	-.468	.641	-.050	.918	1.089	.918
	R_con	.080 <sup>b</sup>	.728	.468	.077	.733	1.365	.733
	SMSP_d	.183 <sup>b</sup>	1.970	.052	.206	.980	1.020	.980
2	Nodes	-.052 <sup>c</sup>	-.515	.608	-.055	.787	1.271	.369
	Edges_d	-.062 <sup>c</sup>	-.591	.556	-.063	.742	1.348	.369
	Reciprocity	-.173 <sup>c</sup>	-1.388	.169	-.147	.517	1.935	.229
	Den_d	-.013 <sup>c</sup>	-.129	.898	-.014	.761	1.314	.367
	CC_d	.183 <sup>c</sup>	2.058	.043	.215	.985	1.015	.411
	TSpaths_d	-.111 <sup>c</sup>	-.802	.425	-.086	.425	2.352	.241
	AvgPL_d	1.553 <sup>c</sup>	4.117	.000	.404	.048	20.832	.048
	AvgGL_d	-.080 <sup>c</sup>	-.647	.520	-.069	.530	1.887	.322
	PL_TpinN	-.201 <sup>c</sup>	-1.920	.058	-.202	.716	1.396	.341



	PL_TSpinN	-.110 <sup>c</sup>	-1.085	.281	-.116	.789	1.267	.354
	S_con	-.086 <sup>c</sup>	-.909	.366	-.097	.901	1.110	.382
	R_con	.090 <sup>c</sup>	.859	.393	.092	.732	1.366	.368
	SMSP_d	.181 <sup>c</sup>	2.033	.045	.213	.980	1.020	.414
3	Nodes	-.051 <sup>d</sup>	-.550	.584	-.059	.787	1.271	.048
	Edges_d	-.055 <sup>d</sup>	-.566	.573	-.061	.742	1.349	.048
	Reciprocity	-.189 <sup>d</sup>	-1.660	.101	-.176	.516	1.937	.048
	Den_d	.035 <sup>d</sup>	.363	.718	.039	.750	1.334	.047
	CC_d	.107 <sup>d</sup>	1.258	.212	.134	.929	1.076	.045
	TSpaths_d	-.107 <sup>d</sup>	-.845	.400	-.091	.425	2.352	.048
	AvgGL_d	-.140 <sup>d</sup>	-1.225	.224	-.131	.522	1.916	.047
	PL_TpinN	-.032 <sup>d</sup>	-.296	.768	-.032	.581	1.720	.039
	PL_TSpinN	-.065 <sup>d</sup>	-.692	.491	-.074	.778	1.285	.047
	S_con	-.071 <sup>d</sup>	-.814	.418	-.087	.899	1.112	.048
	R_con	.027 <sup>d</sup>	.279	.781	.030	.713	1.402	.047
	SMSP_d	.107 <sup>d</sup>	1.255	.213	.134	.927	1.078	.045

a. Dependent Variable: EVCin\_TpinN

b. Predictors in the Model: (Constant), Tpaths\_d

c. Predictors in the Model: (Constant), Tpaths\_d, GD\_d

d. Predictors in the Model: (Constant), Tpaths\_d, GD\_d, AvgPL\_d

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Tpaths_d	GD_d
1	1	1.944	1.000	.03	.03	
	2	.056	5.913	.97	.97	
2	1	2.919	1.000	.01	.01	.00
	2	.059	7.015	.89	.22	.04
	3	.022	11.570	.10	.77	.96
3	1	3.886	1.000	.00	.00	.00
	2	.085	6.773	.30	.01	.00
	3	.026	12.155	.00	.70	.05
	4	.003	35.504	.70	.28	.94

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		AvgPL_d
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.02

3	.02
4	.96

a. Dependent Variable: EVCin\_TpinN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00026683189 2077	.01956829987 4663	.01098901098 9011	.00416835220 6920
Std. Predicted Value	-2.572	2.058	.000	1.000
Standard Error of Predicted Value	.001	.003	.001	.000
Adjusted Predicted Value	.00030246912 5018	.02168889902 5321	.01101271977 9847	.00422611605 8595
Residual	- .01195636857 3010	.00910075195 1337	.00000000000 0000	.00504252050 9969
Std. Residual	-2.331	1.774	.000	.983
Stud. Residual	-2.357	1.807	-.002	1.003
Deleted Residual	- .01222143415 3616	.00943562947 2136	- .00002370879 0836	.00525652183 5170
Stud. Deleted Residual	-2.422	1.831	-.004	1.010
Mahal. Distance	.092	33.302	2.967	4.603
Cook's Distance	.000	.170	.011	.022

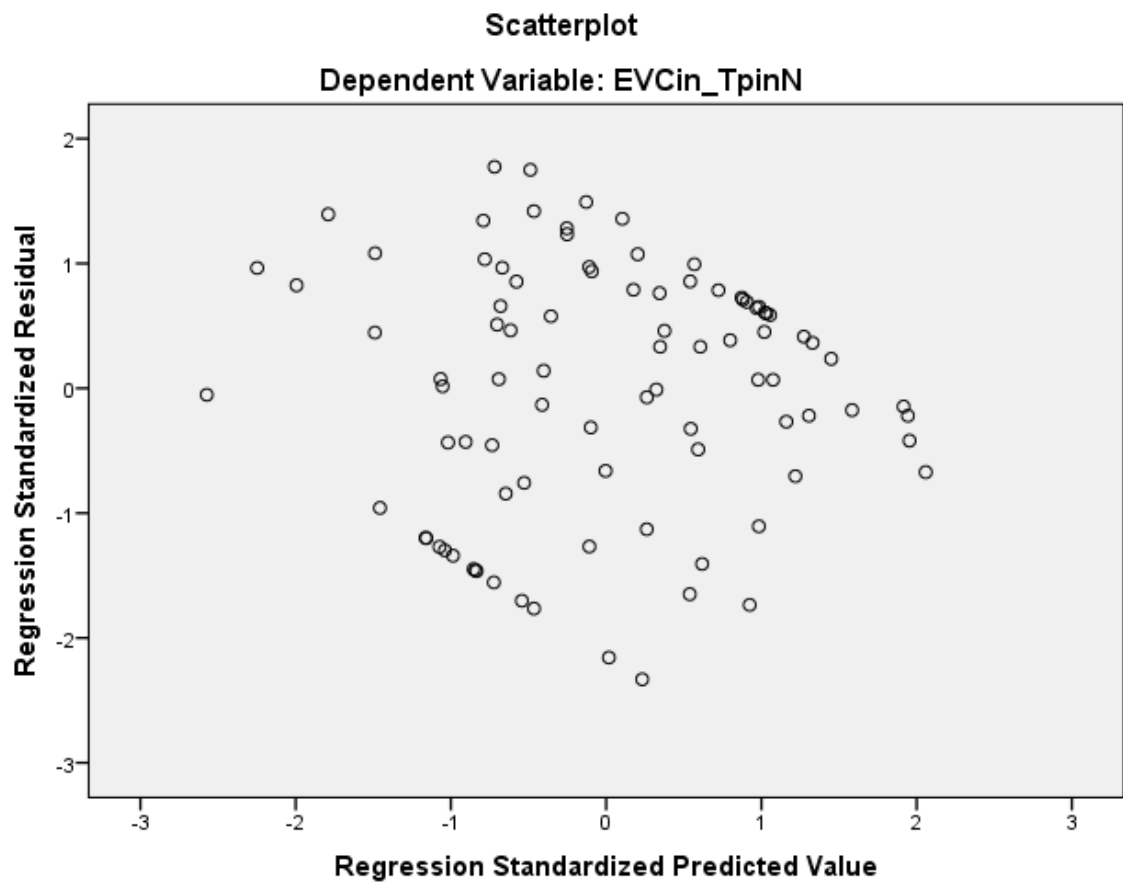
Centered Leverage Value	.001	.370	.033	.051
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#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCin\_TpinN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCin\_TspinN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpins\_d  
AvgPL\_d AvgGL\_d PL\_TpinN PL\_TSpinN S\_con R\_con SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCin_TSpinN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpins_d AvgPL_d AvgGL_d PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCin\_TSpinN

#### Model Summary<sup>d</sup>



Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.216 <sup>a</sup>	.047	.036	.01462171384 6016
2	.348 <sup>b</sup>	.121	.101	.01411799854 4967
3	.416 <sup>c</sup>	.173	.144	.01377606458 4411

a. Predictors: (Constant), GD\_d

b. Predictors: (Constant), GD\_d, TSpats\_d

c. Predictors: (Constant), GD\_d, TSpats\_d, R\_con

d. Dependent Variable: EVCin\_TSpinN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	4.344	.040 <sup>b</sup>
	Residual	.019	89	.000		
	Total	.020	90			
2	Regression	.002	2	.001	6.062	.003 <sup>c</sup>
	Residual	.018	88	.000		
	Total	.020	90			
3	Regression	.003	3	.001	6.052	.001 <sup>d</sup>

Residual	.017	87	.000		
Total	.020	90			

a. Dependent Variable: EVCin\_TSpinN

b. Predictors: (Constant), GD\_d

c. Predictors: (Constant), GD\_d, TSpaths\_d

d. Predictors: (Constant), GD\_d, TSpaths\_d, R\_con

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.022	.005		4.070	.000
	GD_d	-.961	.461	-.216	-2.084	.040
2	(Constant)	-.015	.014		-1.048	.298
	GD_d	-1.692	.519	-.380	-3.257	.002
	TSpaths_d	4.058	1.485	.318	2.732	.008
3	(Constant)	.082	.044		1.866	.065
	GD_d	-1.451	.517	-.325	-2.804	.006
	TSpaths_d	5.493	1.575	.431	3.488	.001
	R_con	-10.503	4.510	-.271	-2.329	.022

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.735	1.360
	TSpats_d	.735	1.360
3	(Constant)		
	GD_d	.706	1.417
	TSpats_d	.623	1.606
	R_con	.702	1.424

a. Dependent Variable: EVCin\_TSpinN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.068 <sup>b</sup>	-.615	.540	-.065	.888	1.127	.888
	Edges_d	-.067 <sup>b</sup>	-.588	.558	-.063	.838	1.194	.838
	Reciprocity	.047 <sup>b</sup>	.435	.664	.046	.942	1.061	.942

	Den_d	.114 <sup>b</sup>	1.028	.307	.109	.863	1.158	.863
	CC_d	-.183 <sup>b</sup>	-1.784	.078	-.187	.997	1.003	.997
	Tpaths_d	.389 <sup>b</sup>	2.498	.014	.257	.417	2.400	.417
	TSpaths_d	.318 <sup>b</sup>	2.732	.008	.280	.735	1.360	.735
	AvgPL_d	-.048 <sup>b</sup>	-.131	.896	-.014	.079	12.624	.079
	AvgGL_d	.020 <sup>b</sup>	.141	.888	.015	.534	1.874	.534
	PL_TpinN	-.125 <sup>b</sup>	-1.130	.262	-.120	.875	1.143	.875
	PL_TSpinN	-.092 <sup>b</sup>	-.853	.396	-.091	.930	1.075	.930
	S_con	.108 <sup>b</sup>	1.030	.306	.109	.983	1.018	.983
	R_con	-.112 <sup>b</sup>	-.987	.327	-.105	.829	1.206	.829
	SMSP_d	-.208 <sup>b</sup>	-2.029	.045	-.211	.987	1.013	.987
2	Nodes	-.199 <sup>c</sup>	-1.773	.080	-.187	.770	1.298	.638
	Edges_d	-.199 <sup>c</sup>	-1.721	.089	-.181	.730	1.370	.641
	Reciprocity	-.059 <sup>c</sup>	-.534	.594	-.057	.827	1.210	.645
	Den_d	.251 <sup>c</sup>	2.228	.028	.232	.754	1.326	.642
	CC_d	-.108 <sup>c</sup>	-1.025	.308	-.109	.900	1.111	.664
	Tpaths_d	.198 <sup>c</sup>	.973	.333	.104	.241	4.151	.241
	AvgPL_d	-.526 <sup>c</sup>	-1.362	.177	-.144	.066	15.085	.066
	AvgGL_d	-.178 <sup>c</sup>	-1.174	.244	-.125	.431	2.321	.431
	PL_TpinN	-.028 <sup>c</sup>	-.241	.810	-.026	.771	1.298	.648
	PL_TSpinN	.052 <sup>c</sup>	.443	.659	.047	.727	1.376	.574
	S_con	.000 <sup>c</sup>	-.004	.997	.000	.832	1.202	.622
	R_con	-.271 <sup>c</sup>	-2.329	.022	-.242	.702	1.424	.623

	SMSP_d	-.132 <sup>c</sup>	-1.239	.219	-.132	.880	1.136	.656
3	Nodes	-.018 <sup>d</sup>	-.111	.912	-.012	.350	2.857	.319
	Edges_d	.007 <sup>d</sup>	.040	.968	.004	.308	3.248	.296
	Reciprocity	-.092 <sup>d</sup>	-.850	.397	-.091	.813	1.229	.538
	Den_d	.127 <sup>d</sup>	.756	.452	.081	.341	2.934	.317
	CC_d	-.112 <sup>d</sup>	-1.086	.280	-.116	.900	1.111	.572
	Tpaths_d	.261 <sup>d</sup>	1.307	.195	.140	.237	4.218	.237
	AvgPL_d	-.359 <sup>d</sup>	-.927	.357	-.099	.063	15.756	.063
	AvgGL_d	-.252 <sup>d</sup>	-1.682	.096	-.178	.416	2.405	.416
	PL_TpinN	-.059 <sup>d</sup>	-.522	.603	-.056	.760	1.316	.573
	PL_TSpinN	-.023 <sup>d</sup>	-.190	.850	-.020	.672	1.488	.539
	S_con	.132 <sup>d</sup>	1.114	.268	.119	.676	1.480	.571
	SMSP_d	-.124 <sup>d</sup>	-1.194	.236	-.128	.879	1.137	.560

a. Dependent Variable: EVCin\_TSpinN

b. Predictors in the Model: (Constant), GD\_d

c. Predictors in the Model: (Constant), GD\_d, TSpats\_d

d. Predictors in the Model: (Constant), GD\_d, TSpats\_d, R\_con

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	GD_d	TSpats_d

1	1	1.957	1.000	.02	.02	
	2	.043	6.762	.98	.98	
2	1	2.946	1.000	.00	.01	.00
	2	.049	7.749	.05	.83	.02
	3	.005	25.006	.94	.17	.98
3	1	3.938	1.000	.00	.00	.00
	2	.056	8.359	.00	.78	.00
	3	.005	27.081	.04	.17	.92
	4	.000	90.131	.96	.05	.08

**Collinearity Diagnostics<sup>a</sup>**

		Variance Proportions
Model	Dimension	R_con
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.00
	3	.01
	4	.98

a. Dependent Variable: EVCin\_TSpinN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00833663437 5155	.02513470128 1786	.01098901098 9011	.00618743914 7946
Std. Predicted Value	-3.123	2.286	.000	1.000
Standard Error of Predicted Value	.002	.007	.003	.001
Adjusted Predicted Value	- .01068421360 1053	.02538552507 7581	.01084001552 5836	.00648062948 5253
Residual	- .02243009768 4264	.02738247253 0007	.00000000000 0000	.01354451759 6408
Std. Residual	-1.628	1.988	.000	.983
Stud. Residual	-1.732	2.166	.005	1.011
Deleted Residual	- .02538552507 7581	.03414919972 4197	.00014899546 3175	.01433142990 2442
Stud. Deleted Residual	-1.753	2.214	.008	1.017
Mahal. Distance	.175	20.272	2.967	3.544
Cook's Distance	.000	.363	.015	.040
Centered Leverage Value	.002	.225	.033	.039

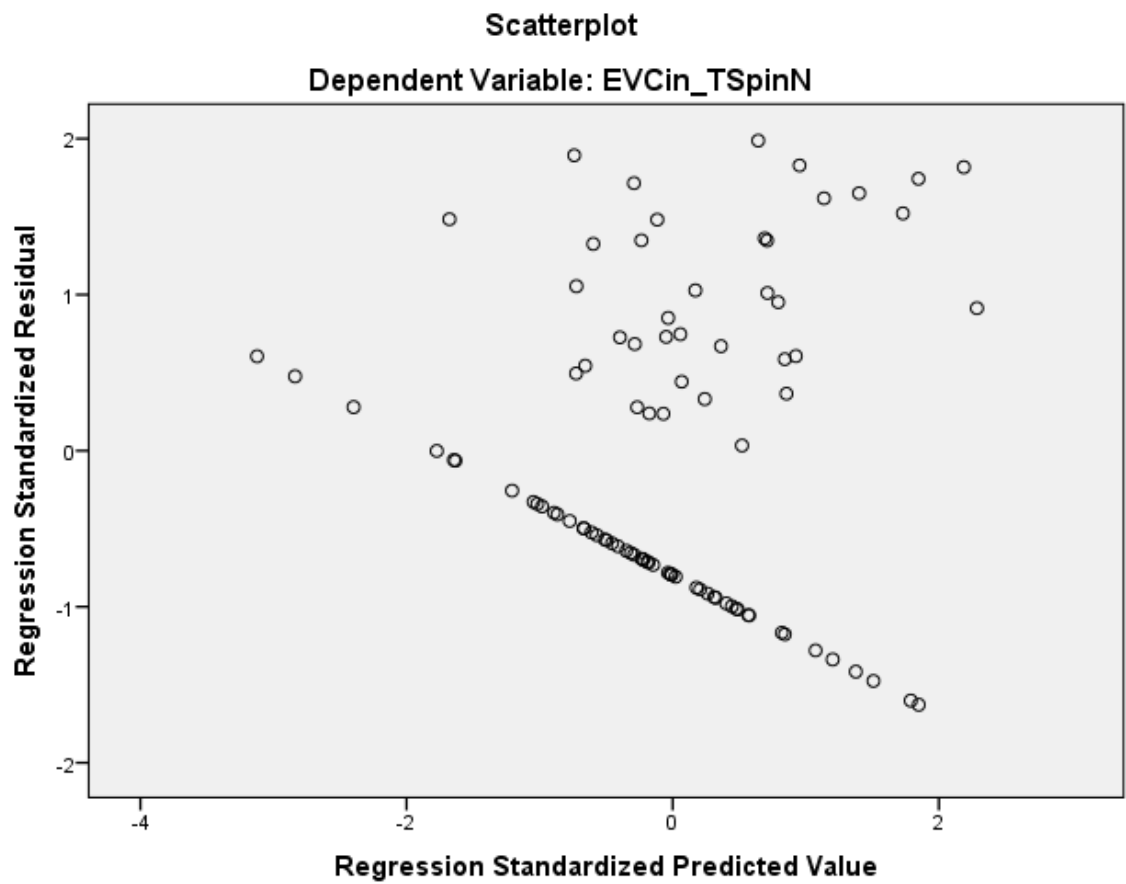
### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCin\_TSpinN

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECin

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT ECin  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	-----------	--	--

a. Dependent Variable: ECin

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.212 <sup>a</sup>	.045	.034	.00523770887 6891

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: ECin

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	4.192	.044 <sup>b</sup>
	Residual	.002	89	.000		

Total	.003	90			
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a. Dependent Variable: ECin

b. Predictors: (Constant), TSpaths\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.022	.005		4.141	.000
TSpaths_d	-.967	.472	-.212	-2.047	.044

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
TSpaths_d	1.000	1.000

a. Dependent Variable: ECin

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.132 <sup>b</sup>	1.095	.276	.116	.735	1.360
	Tpaths_d	.191 <sup>b</sup>	1.220	.226	.129	.434	2.305
	AvgPL_d	.102 <sup>b</sup>	.793	.430	.084	.650	1.537
	AvgGL_d	.168 <sup>b</sup>	1.268	.208	.134	.608	1.646

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.735	
	Tpaths_d	.434	
	AvgPL_d	.650	
	AvgGL_d	.608	

a. Dependent Variable: ECin

b. Predictors in the Model: (Constant), TSpats\_d

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpats_d

1	1	1.994	1.000	.00	.00
	2	.006	18.966	1.00	1.00

a. Dependent Variable: ECin

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00778432656 0795	.01305044069 8862	.01098901098 9011	.00113036237 0572
Std. Predicted Value	-2.835	1.824	.000	1.000
Standard Error of Predicted Value	.001	.002	.001	.000
Adjusted Predicted Value	.00727591663 5990	.01332836598 1579	.01098574919 5563	.00114346447 4138
Residual	- .00858217570 9307	.01176258735 3587	.00000000000 0000	.00520852921 3209
Std. Residual	-1.639	2.246	.000	.994
Stud. Residual	-1.649	2.267	.000	1.005
Deleted Residual	- .00869016163 0511	.01198334246 8739	.00000326179 3448	.00532235272 2871
Stud. Deleted Residual	-1.665	2.322	.002	1.012
Mahal. Distance	.000	8.038	.989	1.447
Cook's Distance	.000	.147	.011	.018

Centered Leverage Value	.000	.089	.011	.016
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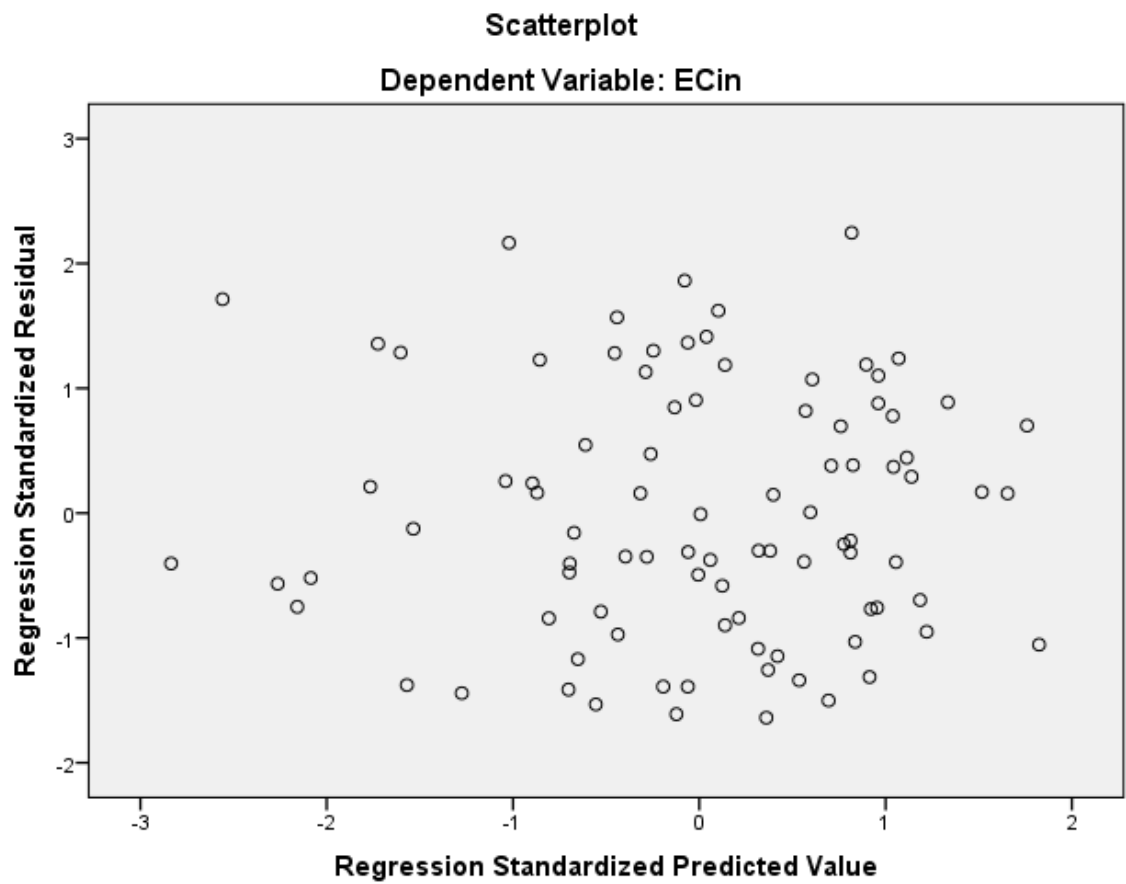
# Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECin

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCinN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:22:20
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_EVCinN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.07
	Memory Required	5952 bytes
	Additional Memory	
	Required for Residual	0 bytes
Variables Created or Modified	Plots	
	COO_2	Cook's Distance

Warnings

No variables were entered into the equation.

## REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCin\_TpinN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpaths\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 10:22:28	
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>

	Split File	<none>
	N of Rows in Working Data File	91
	Missing Value Handling	
	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
Resources		/DEPENDENT EVCin_TpinN
		/METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d
		/SCATTERPLOT=(*ZRESID ,*ZPRED)
		/SAVE COOK.
	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.24
	Memory Required	6000 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Created or Modified	COO_3	Cook's Distance
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**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCin\_TpinN

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.469 <sup>a</sup>	.220	.211	.00581037392 6536
2	.539 <sup>b</sup>	.290	.274	.00557408866 3898
3	.637 <sup>c</sup>	.406	.385	.00512872368 6104

a. Predictors: (Constant), Tpaths\_d

b. Predictors: (Constant), Tpaths\_d, GD\_d

c. Predictors: (Constant), Tpaths\_d, GD\_d, AvgPL\_d

d. Dependent Variable: EVCin\_TpinN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	25.104	.000 <sup>b</sup>
	Residual	.003	89	.000		
	Total	.004	90			

2	Regression	.001	2	.001	17.991	.000 <sup>c</sup>
	Residual	.003	88	.000		
	Total	.004	90			
3	Regression	.002	3	.001	19.817	.000 <sup>d</sup>
	Residual	.002	87	.000		
	Total	.004	90			

a. Dependent Variable: EVCin\_TpinN

b. Predictors: (Constant), Tpaths\_d

c. Predictors: (Constant), Tpaths\_d, GD\_d

d. Predictors: (Constant), Tpaths\_d, GD\_d, AvgPL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.002	.002		1.201	.233
	Tpaths_d	.798	.159	.469	5.010	.000
2	(Constant)	.005	.002		2.545	.013
	Tpaths_d	1.331	.237	.783	5.625	.000
	GD_d	-.804	.272	-.411	-2.950	.004
3	(Constant)	.014	.003		4.914	.000





1	GD_d	-.411 <sup>b</sup>	-2.950	.004	-.300	.417	2.400
	TSpaths_d	-.051 <sup>b</sup>	-.361	.719	-.038	.434	2.305
	AvgPL_d	-.190 <sup>b</sup>	-1.083	.282	-.115	.283	3.537
	AvgGL_d	-.214 <sup>b</sup>	-1.925	.057	-.201	.686	1.458
2	TSpaths_d	-.111 <sup>c</sup>	-.802	.425	-.086	.425	2.352
	AvgPL_d	1.553 <sup>c</sup>	4.117	.000	.404	.048	20.832
	AvgGL_d	-.080 <sup>c</sup>	-.647	.520	-.069	.530	1.887
3	TSpaths_d	-.107 <sup>d</sup>	-.845	.400	-.091	.425	2.352
	AvgGL_d	-.140 <sup>d</sup>	-1.225	.224	-.131	.522	1.916

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.417
	TSpaths_d	.434
	AvgPL_d	.283
	AvgGL_d	.686
2	TSpaths_d	.241
	AvgPL_d	.048
	AvgGL_d	.322
3	TSpaths_d	.048
	AvgGL_d	.047

a. Dependent Variable: EVCin\_TpinN

b. Predictors in the Model: (Constant), Tpaths\_d

c. Predictors in the Model: (Constant), Tpaths\_d, GD\_d

d. Predictors in the Model: (Constant), Tpaths\_d, GD\_d, AvgPL\_d

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Tpaths_d	GD_d
1	1	1.944	1.000	.03	.03	
	2	.056	5.913	.97	.97	
2	1	2.919	1.000	.01	.01	.00
	2	.059	7.015	.89	.22	.04
	3	.022	11.570	.10	.77	.96
3	1	3.886	1.000	.00	.00	.00
	2	.085	6.773	.30	.01	.00
	3	.026	12.155	.00	.70	.05
	4	.003	35.504	.70	.28	.94

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		AvgPL_d
1	1	

	2	
2	1	
	2	
	3	
3	1	.00
	2	.02
	3	.02
	4	.96

a. Dependent Variable: EVCin\_TpinN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00026683189 2077	.01956829987 4663	.01098901098 9011	.00416835220 6920
Std. Predicted Value	-2.572	2.058	.000	1.000
Standard Error of Predicted Value	.001	.003	.001	.000
Adjusted Predicted Value	.00030246912 5018	.02168889902 5321	.01101271977 9847	.00422611605 8595
Residual	- .01195636857 3010	.00910075195 1337	.00000000000 0000	.00504252050 9969
Std. Residual	-2.331	1.774	.000	.983

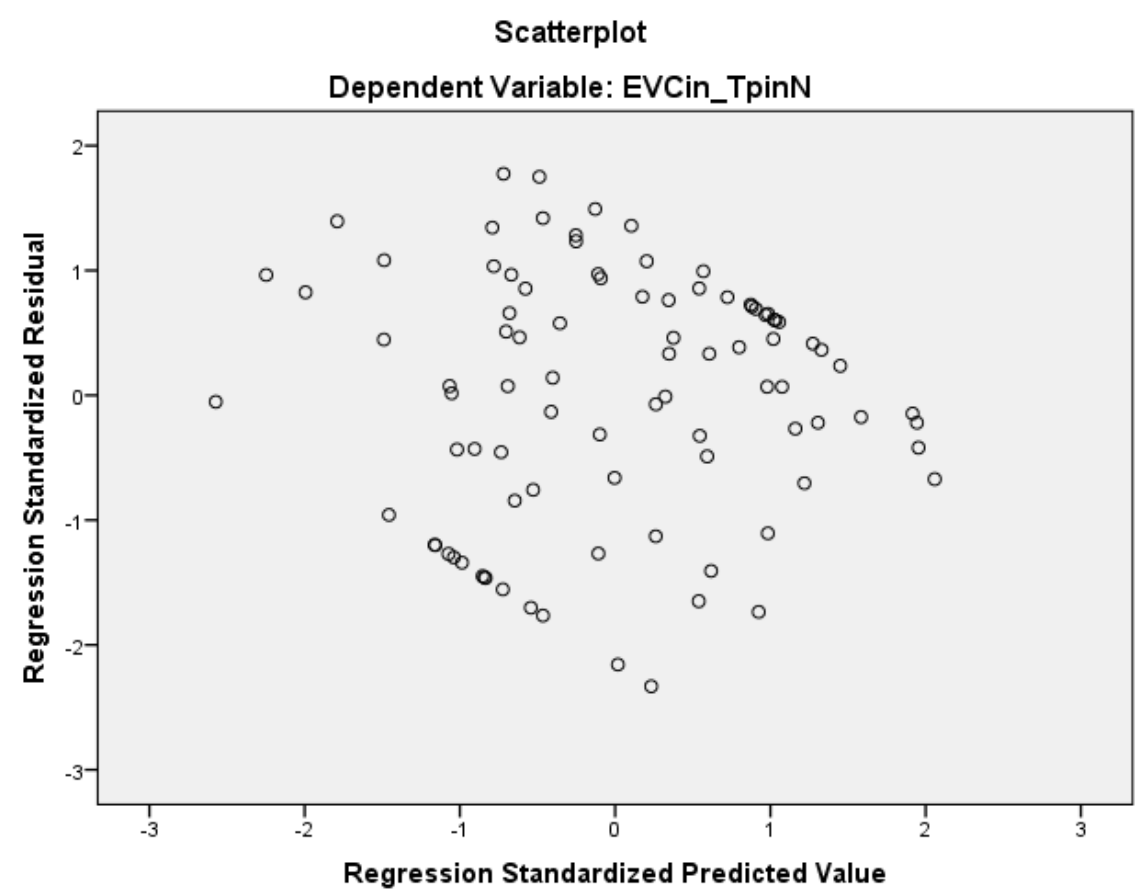
Stud. Residual	-2.357	1.807	-.002	1.003
Deleted Residual	-	-	-	-
	.01222143415	.00943562947	.00002370879	.00525652183
	3616	2136	0836	5170
Stud. Deleted Residual	-2.422	1.831	-.004	1.010
Mahal. Distance	.092	33.302	2.967	4.603
Cook's Distance	.000	.170	.011	.022
Centered Leverage Value	.001	.370	.033	.051

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCin\_TpinN

Charts



REGRESSION

```

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCin_TSpinN

/METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:23:36
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCin_TSpinN  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.22
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance



**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	TSpats_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCin\_TSpinN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.216 <sup>a</sup>	.047	.036	.01462171384 6016

2	.348 <sup>b</sup>	.121	.101	.01411799854 4967
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a. Predictors: (Constant), GD\_d

b. Predictors: (Constant), GD\_d, TSpats\_d

c. Dependent Variable: EVCin\_TSpinN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	4.344	.040 <sup>b</sup>
	Residual	.019	89	.000		
	Total	.020	90			
2	Regression	.002	2	.001	6.062	.003 <sup>c</sup>
	Residual	.018	88	.000		
	Total	.020	90			

a. Dependent Variable: EVCin\_TSpinN

b. Predictors: (Constant), GD\_d

c. Predictors: (Constant), GD\_d, TSpats\_d

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.022	.005		4.070	.000
	GD_d	-.961	.461	-.216	-2.084	.040
2	(Constant)	-.015	.014		-1.048	.298
	GD_d	-1.692	.519	-.380	-3.257	.002
	TSpaths_d	4.058	1.485	.318	2.732	.008

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.735	1.360
	TSpaths_d	.735	1.360

a. Dependent Variable: EVCin\_TSpinN

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
-------	---------	---	------	---------	-------------------------

					Correlation	Tolerance	VIF
1	Tpaths_d	.389 <sup>b</sup>	2.498	.014	.257	.417	2.400
	TSpaths_d	.318 <sup>b</sup>	2.732	.008	.280	.735	1.360
	AvgPL_d	-.048 <sup>b</sup>	-.131	.896	-.014	.079	12.624
	AvgGL_d	.020 <sup>b</sup>	.141	.888	.015	.534	1.874
2	Tpaths_d	.198 <sup>c</sup>	.973	.333	.104	.241	4.151
	AvgPL_d	-.526 <sup>c</sup>	-1.362	.177	-.144	.066	15.085
	AvgGL_d	-.178 <sup>c</sup>	-1.174	.244	-.125	.431	2.321

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.417
	TSpaths_d	.735
	AvgPL_d	.079
	AvgGL_d	.534
2	Tpaths_d	.241
	AvgPL_d	.066
	AvgGL_d	.431

a. Dependent Variable: EVCin\_TSpinN

b. Predictors in the Model: (Constant), GD\_d

c. Predictors in the Model: (Constant), GD\_d, TSpaths\_d

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	GD_d	TSpaths_d
1	1	1.957	1.000	.02	.02	
	2	.043	6.762	.98	.98	
2	1	2.946	1.000	.00	.01	.00
	2	.049	7.749	.05	.83	.02
	3	.005	25.006	.94	.17	.98

a. Dependent Variable: EVCin\_TSpinN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00816688127 8157	.02471921779 2153	.01098901098 9011	.00518167574 2485
Std. Predicted Value	-3.697	2.650	.000	1.000
Standard Error of Predicted Value	.001	.007	.002	.001
Adjusted Predicted Value	- .01046628318 7270	.02781596779 8233	.01087593655 9265	.00558037939 4622

Residual	- .02471921779 2153	.03235168755 0545	.00000000000 0000	.01396025059 3334
Std. Residual	-1.751	2.292	.000	.989
Stud. Residual	-1.857	2.559	.004	1.012
Deleted Residual	- .02781596779 8233	.04034077003 5982	.00011307442 9746	.01463257355 3502
Stud. Deleted Residual	-1.884	2.645	.008	1.020
Mahal. Distance	.006	18.784	1.978	3.189
Cook's Distance	.000	.539	.017	.059
Centered Leverage Value	.000	.209	.022	.035

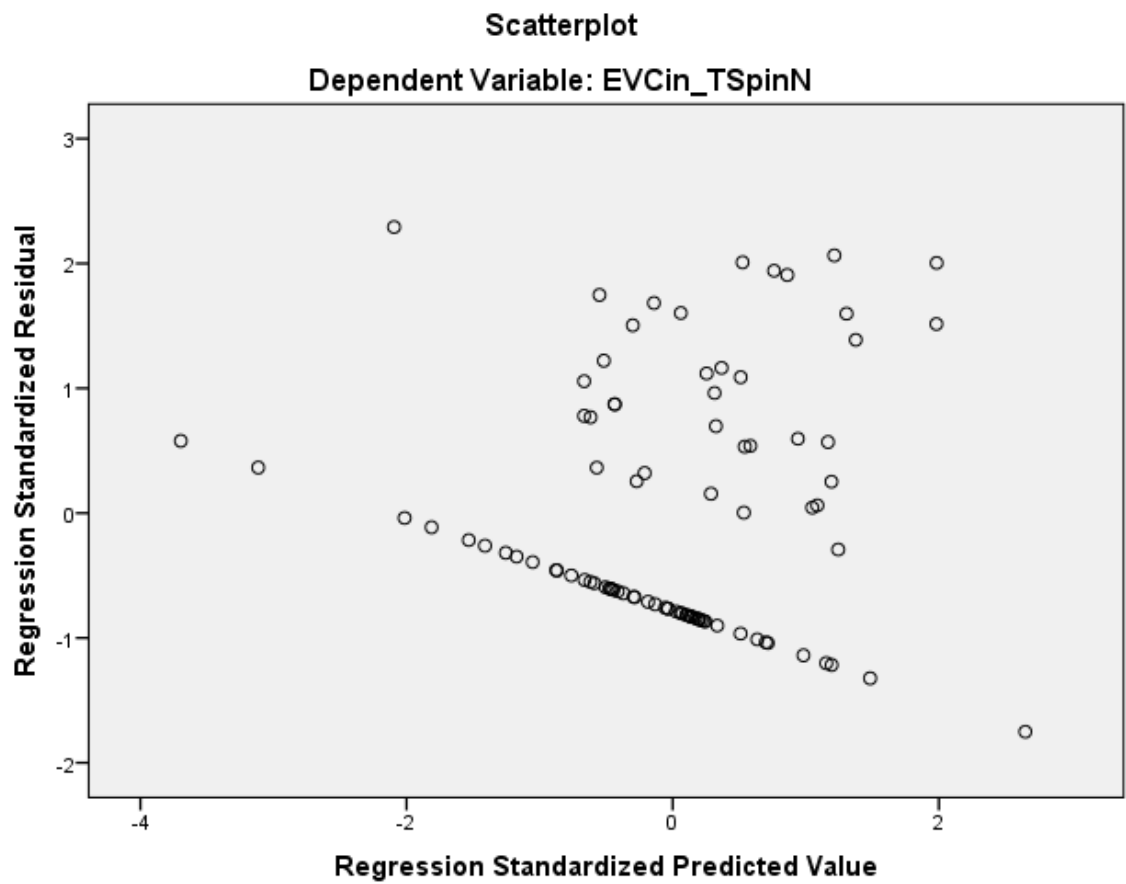
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91

Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCin\_TSpinN

## Charts



## REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_TpinN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpaths\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 10:17:57
Comments	
Input	Active Dataset
	DataSet4



	Filter	<none>	
	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File		91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on cases with no missing values for any variable used.	
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_TpinN  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.20
	Elapsed Time		00:00:00.19
	Memory Required	5920 bytes	

	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_1	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Tpaths_d	.	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_TpinN

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527 <sup>a</sup>	.278	.270	.00207262363 9520

a. Predictors: (Constant), Tpaths\_d

b. Dependent Variable: PL\_TpinN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	34.250	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.001	90			

a. Dependent Variable: PL\_TpinN

b. Predictors: (Constant), Tpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.015	.001		22.159	.000
	Tpaths_d	-.332	.057	-.527	-5.852	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_d	1.000	1.000

a. Dependent Variable: PL\_TpinN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.116 <sup>b</sup>	.831	.408	.088	.417	2.400
	TSpaths_d	-.143 <sup>b</sup>	-1.044	.299	-.111	.434	2.305
	AvgPL_d	-.156 <sup>b</sup>	-.922	.359	-.098	.283	3.537
	AvgGL_d	.122 <sup>b</sup>	1.119	.266	.118	.686	1.458

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.417	
	TSpaths_d	.434	
	AvgPL_d	.283	

AvgGL_d	.686
---------	------

a. Dependent Variable: PL\_TpinN

b. Predictors in the Model: (Constant), Tpaths\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Tpaths_d
1	1	1.944	1.000	.03	.03
	2	.056	5.913	.97	.97

a. Dependent Variable: PL\_TpinN

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00455839186 9068	.01241953857 2431	.01098901098 9011	.00127859168 7111
Std. Predicted Value	-5.029	1.119	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00301559176 2960	.01233744248 7478	.01096663665 7659	.00137364437 8579

Residual	- .00222744396 8877	.01065985672 1759	.00000000000 0000	.00206107689 9874
Std. Residual	-1.075	5.143	.000	.994
Stud. Residual	-1.081	5.194	.005	1.011
Deleted Residual	- .00225234567 1877	.01087331958 1151	.00002237433 1352	.00213540331 5758
Stud. Deleted Residual	-1.082	6.188	.022	1.085
Mahal. Distance	.000	25.295	.989	2.929
Cook's Distance	.000	.949	.020	.104
Centered Leverage Value	.000	.281	.011	.033

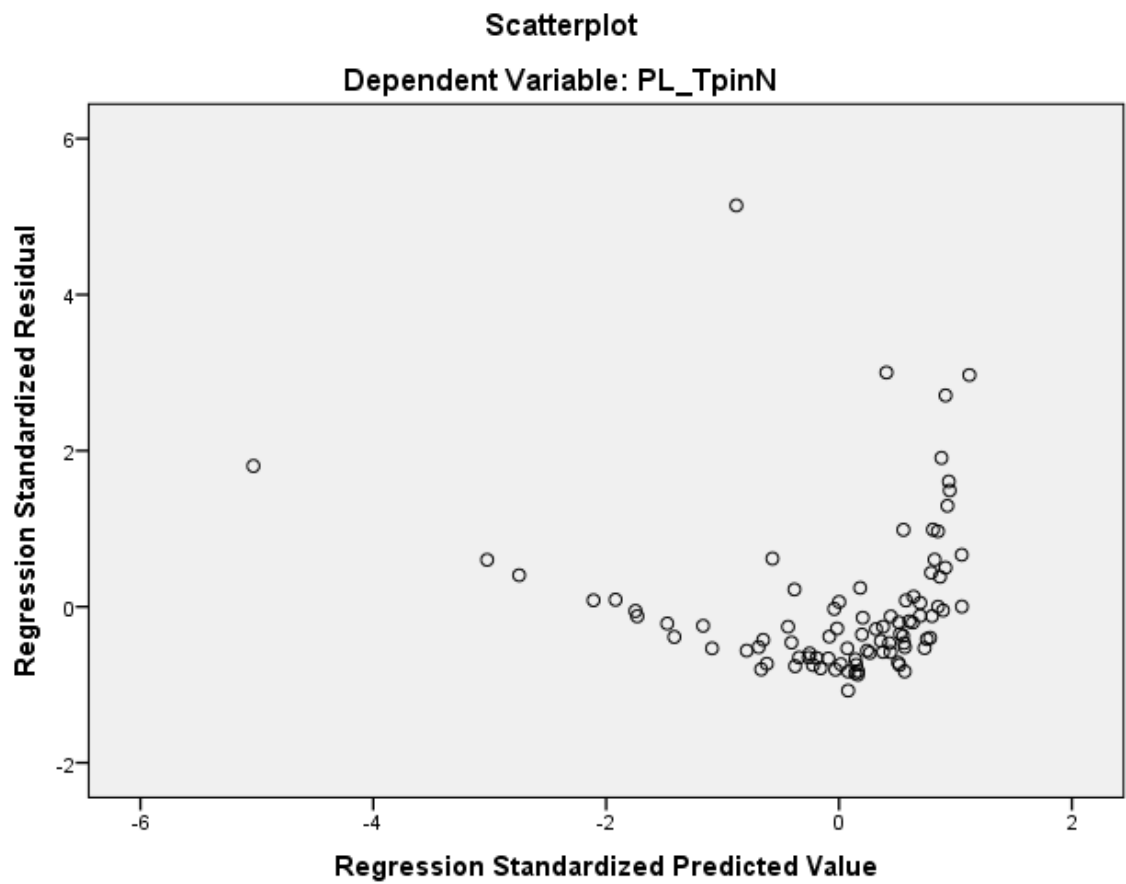
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91

Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_TpinN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_TSpinN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 10:18:17
Comments	
Input	Active Dataset
	DataSet4



	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_TSpinN  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.17
	Memory Required	5952 bytes

	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_2	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	TSpaths_d	.	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_TSpinN

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523 <sup>a</sup>	.273	.265	.00282714740 6184

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: PL\_TSpinN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	33.462	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: PL\_TSpinN

b. Predictors: (Constant), TSpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.027	.003		9.652	.000
	TSpaths_d	-1.475	.255	-.523	-5.785	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000

a. Dependent Variable: PL\_TSpinN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.006 <sup>b</sup>	.059	.953	.006	.735	1.360
	Tpaths_d	-.117 <sup>b</sup>	-.851	.397	-.090	.434	2.305
	AvgPL_d	-.052 <sup>b</sup>	-.465	.643	-.050	.650	1.537
	AvgGL_d	.062 <sup>b</sup>	.535	.594	.057	.608	1.646

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.735	
	Tpaths_d	.434	
	AvgPL_d	.650	

AvgGL_d	.608
---------	------

a. Dependent Variable: PL\_TSpinN

b. Predictors in the Model: (Constant), TSpats\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpats_d
1	1	1.994	1.000	.00	.00
	2	.006	18.966	1.00	1.00

a. Dependent Variable: PL\_TSpinN

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00610166462 1383	.01413282193 2435	.01098901098 9011	.00172387406 7753
Std. Predicted Value	-2.835	1.824	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00592974061 1464	.01416647993 0282	.01098056886 8780	.00173315873 6620

Residual	- .01277874503 2847	.00946851819 7536	.00000000000 0000	.00281139715 8809
Std. Residual	-4.520	3.349	.000	.994
Stud. Residual	-4.573	3.428	.001	1.006
Deleted Residual	- .01307911053 2999	.00991851743 3107	.00000844212 0231	.00287662591 4511
Stud. Deleted Residual	-5.199	3.659	-.003	1.062
Mahal. Distance	.000	8.038	.989	1.447
Cook's Distance	.000	.279	.012	.040
Centered Leverage Value	.000	.089	.011	.016

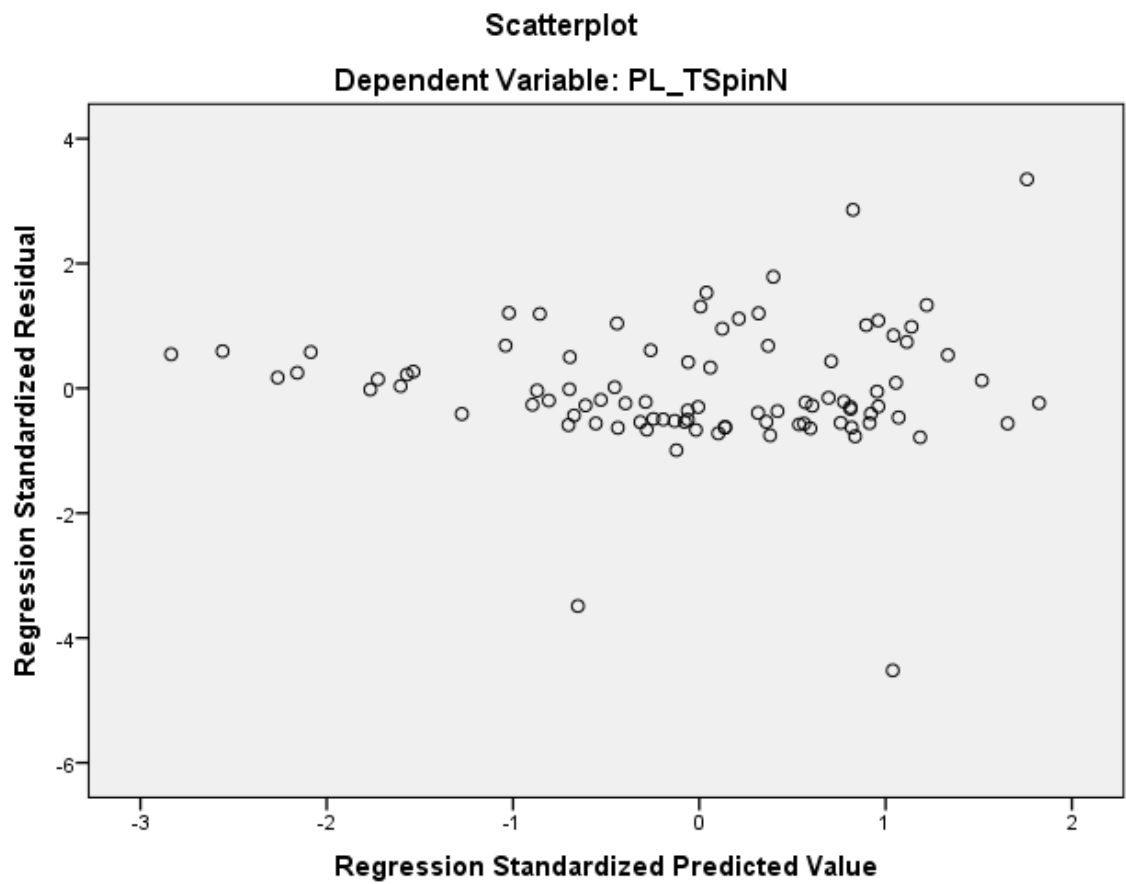
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91

Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_TSpinN

## Charts



## REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S\_con

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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Input	Active Dataset
	DataSet4



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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT S_con  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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Variables Created or Modified	COO_3	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_con

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.401 <sup>a</sup>	.161	.151	.00807661649 6291
2	.466 <sup>b</sup>	.217	.200	.00784446223 5465

a. Predictors: (Constant), TSpaths\_d

b. Predictors: (Constant), TSpaths\_d, AvgGL\_d

c. Dependent Variable: S\_con

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	17.064	.000 <sup>b</sup>
	Residual	.006	89	.000		
	Total	.007	90			
2	Regression	.002	2	.001	12.217	.000 <sup>c</sup>
	Residual	.005	88	.000		
	Total	.007	90			

a. Dependent Variable: S\_con

b. Predictors: (Constant), TSpaths\_d

c. Predictors: (Constant), TSpaths\_d, AvgGL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.022	.008		-2.743	.007
	TSpaths_d	3.010	.729	.401	4.131	.000
2	(Constant)	-.030	.008		-3.534	.001
	TSpaths_d	4.442	.908	.592	4.893	.000
	AvgGL_d	-.753	.299	-.305	-2.519	.014

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.608	1.646
	AvgGL_d	.608	1.646

a. Dependent Variable: S\_con

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.101 <sup>b</sup>	-.891	.375	-.095	.735	1.360
	Tpaths_d	-.037 <sup>b</sup>	-.250	.803	-.027	.434	2.305
	AvgPL_d	-.105 <sup>b</sup>	-.875	.384	-.093	.650	1.537
	AvgGL_d	-.305 <sup>b</sup>	-2.519	.014	-.259	.608	1.646
2	GD_d	.068 <sup>c</sup>	.521	.604	.056	.521	1.918
	Tpaths_d	.026 <sup>c</sup>	.180	.857	.019	.421	2.377
	AvgPL_d	.056 <sup>c</sup>	.415	.679	.044	.487	2.054

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.735	
	Tpaths_d	.434	
	AvgPL_d	.650	
	AvgGL_d	.608	
2	GD_d	.431	

Tpaths_d	.373
AvgPL_d	.455

a. Dependent Variable: S\_con

b. Predictors in the Model: (Constant), TSpats\_d

c. Predictors in the Model: (Constant), TSpats\_d, AvgGL\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpats_d	AvgGL_d
1	1	1.994	1.000	.00	.00	
	2	.006	18.966	1.00	1.00	
2	1	2.942	1.000	.00	.00	.01
	2	.054	7.408	.05	.01	.69
	3	.004	27.169	.95	.99	.30

a. Dependent Variable: S\_con

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	.00490700593 2182	.02274524047 9708	.01098901098 9011	.00408740350 5600
Std. Predicted Value	-1.488	2.876	.000	1.000
Standard Error of Predicted Value	.001	.003	.001	.001
Adjusted Predicted Value	.00354123720 8992	.02355622127 6522	.01094305914 2593	.00412015164 3604
Residual	- .00887766294 1813	.06411342322 8264	.00000000000 0000	.00775681186 1698
Std. Residual	-1.132	8.173	.000	.989
Stud. Residual	-1.148	8.439	.003	1.020
Deleted Residual	- .00913289003 0742	.06836079806 0894	.00004595184 6418	.00826530254 0346
Stud. Deleted Residual	-1.150	19.219	.122	2.083
Mahal. Distance	.020	15.056	1.978	2.875
Cook's Distance	.000	1.573	.023	.166
Centered Leverage Value	.000	.167	.022	.032

#### Residuals Statistics<sup>a</sup>

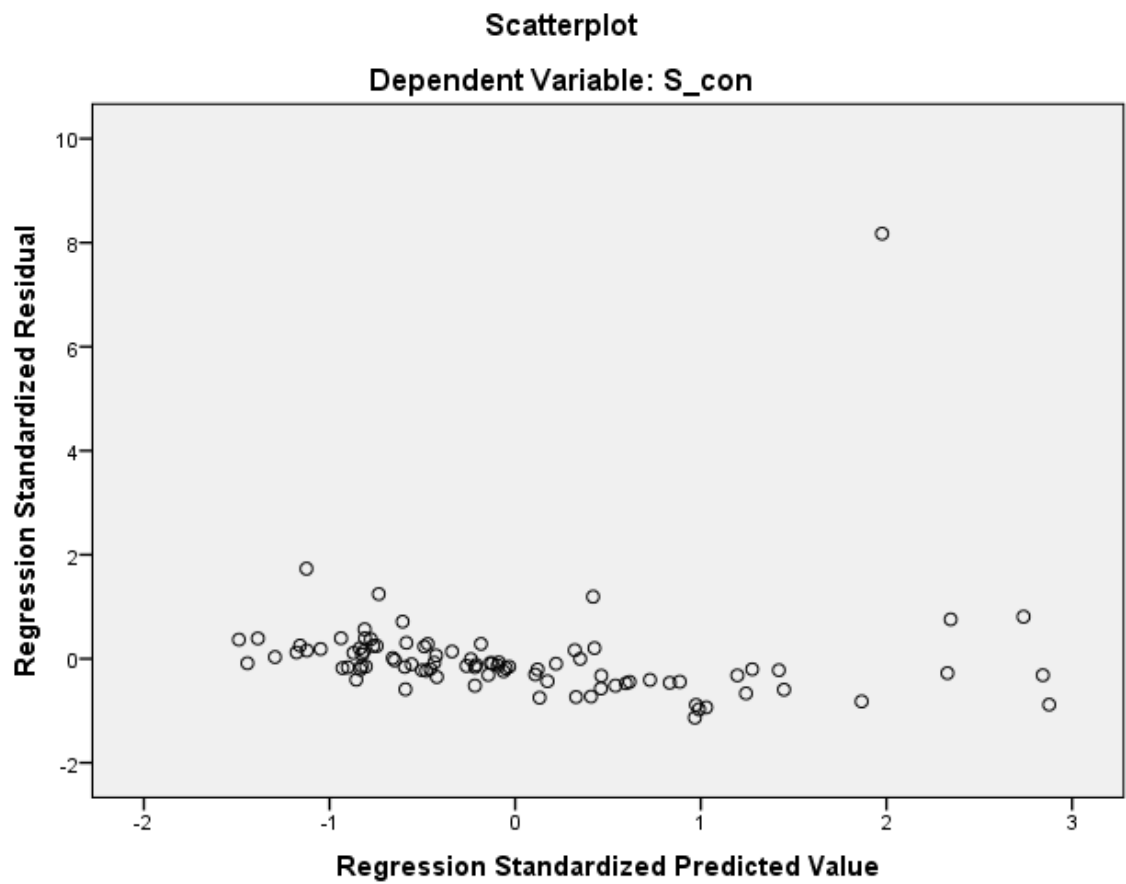
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91

Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: S\_con

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT R\_con

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT R_con  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: R\_con

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518 <sup>a</sup>	.269	.260	.00033043849 4772
2	.562 <sup>b</sup>	.316	.300	.00032139529 2165

a. Predictors: (Constant), TSpaths\_d

b. Predictors: (Constant), TSpaths\_d, AvgPL\_d

c. Dependent Variable: R\_con

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	32.682	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	20.313	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: R\_con

b. Predictors: (Constant), TSpaths\_d

c. Predictors: (Constant), TSpaths\_d, AvgPL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.009	.000		27.676	.000

	TSpaths_d	.170	.030	.518	5.717	.000
2	(Constant)	.009	.000		27.224	.000
	TSpaths_d	.118	.036	.359	3.283	.001
	AvgPL_d	.023	.009	.270	2.466	.016

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.650	1.537
	AvgPL_d	.650	1.537

a. Dependent Variable: R\_con

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.200 <sup>b</sup>	1.916	.059	.200	.735	1.360
	Tpaths_d	.293 <sup>b</sup>	2.172	.033	.226	.434	2.305
	AvgPL_d	.270 <sup>b</sup>	2.466	.016	.254	.650	1.537

	AvgGL_d	-.051 <sup>b</sup>	-.434	.666	-.046	.608	1.646
2	GD_d	-.399 <sup>c</sup>	-1.244	.217	-.132	.075	13.345
	Tpaths_d	.101 <sup>c</sup>	.490	.626	.052	.185	5.397
	AvgGL_d	-.255 <sup>c</sup>	-1.979	.051	-.208	.455	2.199

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.735
	Tpaths_d	.434
	AvgPL_d	.650
	AvgGL_d	.608
2	GD_d	.066
	Tpaths_d	.185
	AvgGL_d	.455

a. Dependent Variable: R\_con

b. Predictors in the Model: (Constant), TSpaths\_d

c. Predictors in the Model: (Constant), TSpaths\_d, AvgPL\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	TSpaths_d	AvgPL_d
1	1	1.994	1.000	.00	.00	
	2	.006	18.966	1.00	1.00	
2	1	2.907	1.000	.00	.00	.01
	2	.089	5.719	.03	.01	.72
	3	.004	26.627	.97	.99	.27

a. Dependent Variable: R\_con

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01059863902 6284	.01173684280 3657	.01098901098 9011	.00021593365 1755
Std. Predicted Value	-1.808	3.463	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.01058561261 7433	.01186852063 9837	.01099019974 4302	.00021986143 8604
Residual	- .00065021670 8891	.00106175953 9880	.00000000000 0000	.00031780417 0602
Std. Residual	-2.023	3.304	.000	.989
Stud. Residual	-2.138	3.369	-.002	1.006



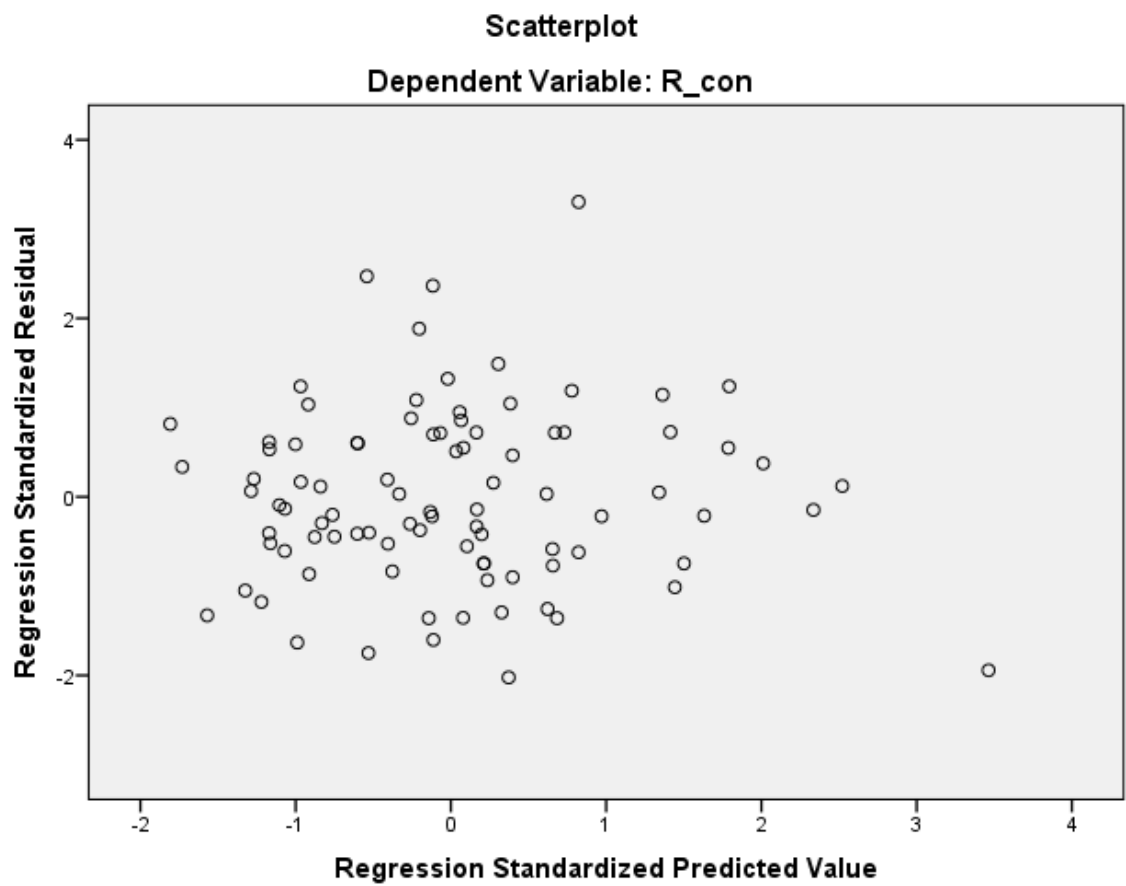
Deleted Residual	- .00075605057 6456	.00110406428 5755	- .00000118875 5291	.00032943928 7354
Stud. Deleted Residual	-2.183	3.589	.001	1.023
Mahal. Distance	.036	17.548	1.978	2.863
Cook's Distance	.000	.321	.012	.037
Centered Leverage Value	.000	.195	.022	.032

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: R\_con

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT SMSP_d

/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		<p>REGRESSION</p> <p>/MISSING LISTWISE</p> <p>/STATISTICS COEFF OUTS R ANOVA COLLIN TOL</p> <p>/CRITERIA=PIN(.05) POUT(.10)</p> <p>/NOORIGIN</p> <p>/DEPENDENT SMSP_d</p> <p>/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
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	Memory Required	6080 bytes
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Variables Created or Modified	COO_5	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: SMSP\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.339 <sup>a</sup>	.115	.105	.02279852247 0116

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: SMSP\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.006	1	.006	11.519	.001 <sup>b</sup>
	Residual	.046	89	.001		
	Total	.052	90			

a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), TSpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.088	.023		3.859	.000
	TSpaths_d	-6.980	2.057	-.339	-3.394	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000

a. Dependent Variable: SMSP\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.083 <sup>b</sup>	.712	.479	.076	.735	1.360
	Tpaths_d	.261 <sup>b</sup>	1.743	.085	.183	.434	2.305
	AvgPL_d	.195 <sup>b</sup>	1.589	.116	.167	.650	1.537
	AvgGL_d	.002 <sup>b</sup>	.018	.986	.002	.608	1.646

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.735
	Tpaths_d	.434
	AvgPL_d	.650
	AvgGL_d	.608

a. Dependent Variable: SMSP\_d

b. Predictors in the Model: (Constant), TSpats\_d

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpaths_d
1	1	1.994	1.000	.00	.00
	2	.006	18.966	1.00	1.00

a. Dependent Variable: SMSP\_d

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .01213468331 8436	.02586344815 7907	.01098901098 9011	.00815623291 4568
Std. Predicted Value	-2.835	1.824	.000	1.000
Standard Error of Predicted Value	.002	.007	.003	.001
Adjusted Predicted Value	- .01354111451 6556	.02529736794 5313	.01088943644 1600	.00819675353 9044
Residual	- .01874438486 9933	.16464711725 7118	.00000000000 0000	.02267151021 4613
Std. Residual	-.822	7.222	.000	.994
Stud. Residual	-.840	7.391	.002	1.012



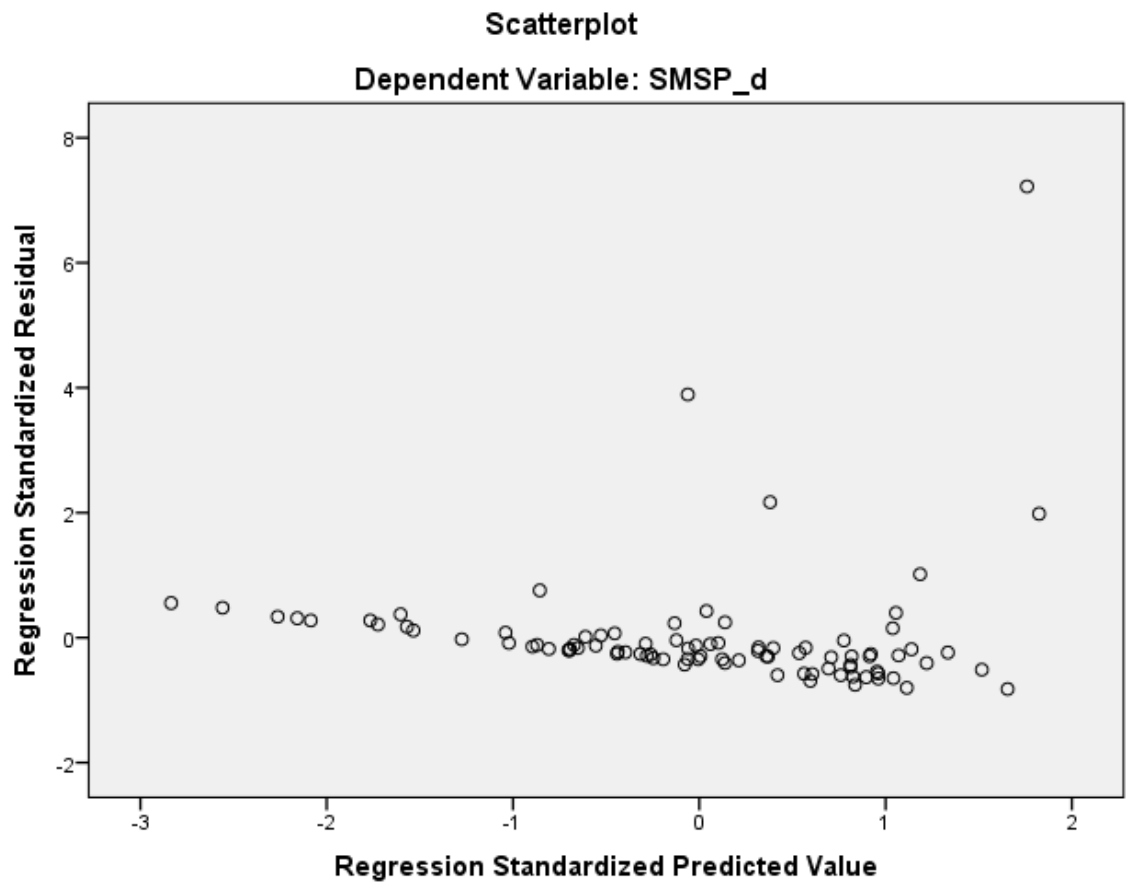
Deleted Residual	- .01955435983 8367	.17247210443 0199	.00009957454 7411	.02349961082 9365
Stud. Deleted Residual	-.838	11.828	.057	1.416
Mahal. Distance	.000	8.038	.989	1.447
Cook's Distance	.000	1.298	.019	.136
Centered Leverage Value	.000	.089	.011	.016

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: SMSP\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S_con

/METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT S_con  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.24
	Memory Required	6112 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_6	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_con

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.585 <sup>a</sup>	.343	.335	.00350996725 2714
2	.612 <sup>b</sup>	.374	.360	.00344461456 6535

a. Predictors: (Constant), TSpaths\_d

b. Predictors: (Constant), TSpaths\_d, AvgGL\_d

c. Dependent Variable: S\_con

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	45.868	.000 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.002	89			
2	Regression	.001	2	.000	25.998	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			

a. Dependent Variable: S\_con

b. Predictors: (Constant), TSpaths\_d

c. Predictors: (Constant), TSpaths\_d, AvgGL\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	-.014	.004		-3.846	.000
	TSpaths_d	2.164	.320	.585	6.773	.000
2	(Constant)	-.016	.004		-4.418	.000
	TSpaths_d	2.712	.409	.734	6.636	.000
	AvgGL_d	-.279	.133	-.231	-2.091	.039

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.589	1.698
	AvgGL_d	.589	1.698

a. Dependent Variable: S\_con

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.028 <sup>b</sup>	-.278	.782	-.030	.729	1.371

	Tpaths_d	.046 <sup>b</sup>	.346	.730	.037	.435	2.299
	AvgPL_d	-.011 <sup>b</sup>	-.104	.918	-.011	.644	1.552
	AvgGL_d	-.231 <sup>b</sup>	-2.091	.039	-.219	.589	1.698
2	GD_d	.116 <sup>c</sup>	.984	.328	.105	.521	1.919
	Tpaths_d	.093 <sup>c</sup>	.713	.478	.077	.423	2.365
	AvgPL_d	.130 <sup>c</sup>	1.067	.289	.114	.487	2.054

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.729
	Tpaths_d	.435
	AvgPL_d	.644
	AvgGL_d	.589
2	GD_d	.421
	Tpaths_d	.367
	AvgPL_d	.445

a. Dependent Variable: S\_con

b. Predictors in the Model: (Constant), TSpats\_d

c. Predictors in the Model: (Constant), TSpats\_d, AvgGL\_d



### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpaths_d	AvgGL_d
1	1	1.994	1.000	.00	.00	
	2	.006	19.007	1.00	1.00	
2	1	2.943	1.000	.00	.00	.01
	2	.054	7.408	.05	.01	.67
	3	.004	27.613	.95	.99	.32

a. Dependent Variable: S\_con

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00571327703 0736	.01791588030 7555	.01018688372 8069	.00263287332 7139
Std. Predicted Value	-1.699	2.936	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00560729857 5342	.01761313714 0870	.01016186585 3041	.00261577561 4303
Residual	- .00618666503 5784	.01103024184 7038	.00000000000 0000	.00340569111 8534
Std. Residual	-1.796	3.202	.000	.989

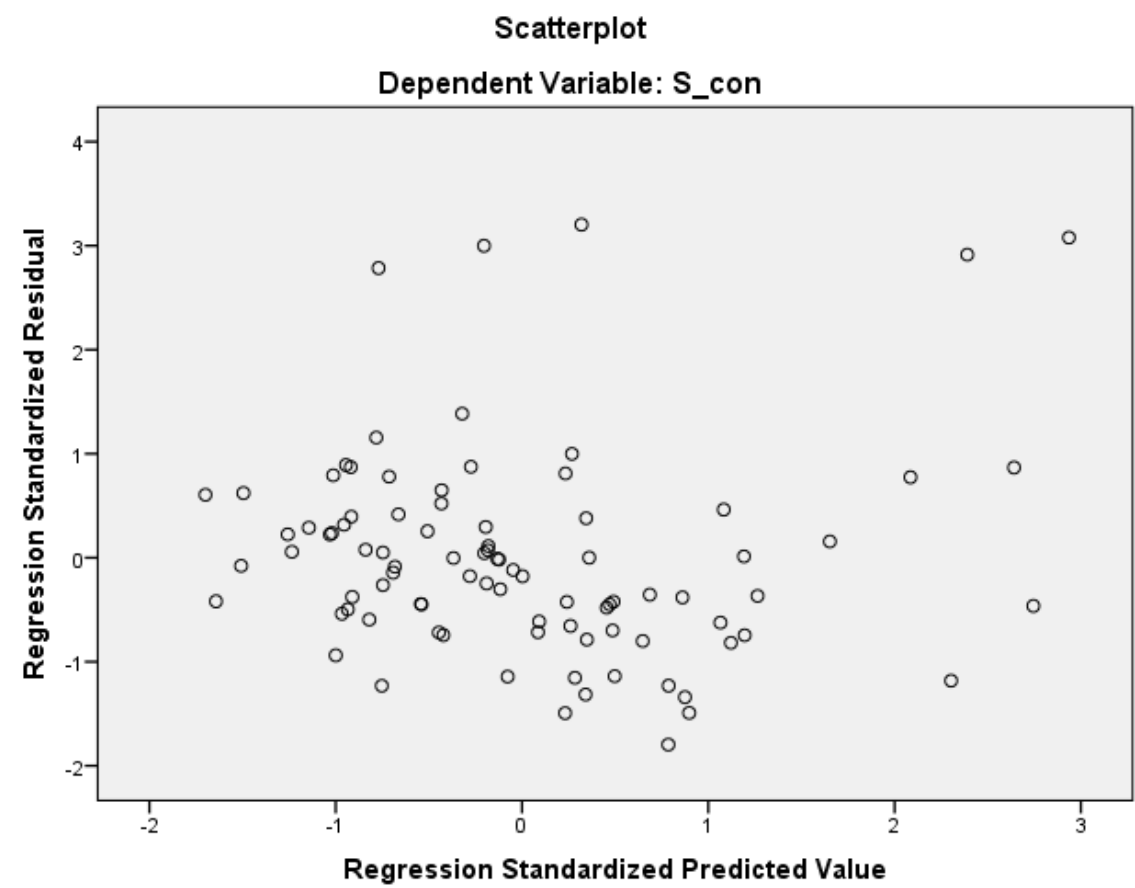
Stud. Residual	-1.823	3.303	.003	1.020
Deleted Residual	-	.01253533549	.00002501787	.00363447829
	.00637536449	6068	5029	6783
	3579			
Stud. Deleted Residual	-1.848	3.512	.013	1.052
Mahal. Distance	.016	14.992	1.978	2.916
Cook's Distance	.000	.777	.024	.097
Centered Leverage Value	.000	.168	.022	.033

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: S\_con

Charts



REGRESSION

```

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT SMSP_d

/METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:20:30
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	89
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT SMSP_d  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Memory Required	6160 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: SMSP\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.311 <sup>a</sup>	.097	.087	.01432525675 5164

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: SMSP\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	9.340	.003 <sup>b</sup>
	Residual	.018	87	.000		
	Total	.020	88			

a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), TSpats\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.054	.015		3.660	.000
	TSpats_d	-4.057	1.328	-.311	-3.056	.003

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpats_d	1.000	1.000

a. Dependent Variable: SMSP\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.014 <sup>b</sup>	-.119	.905	-.013	.721	1.387
	Tpaths_d	.210 <sup>b</sup>	1.361	.177	.145	.431	2.322
	AvgPL_d	.089 <sup>b</sup>	.687	.494	.074	.629	1.591
	AvgGL_d	.022 <sup>b</sup>	.169	.866	.018	.599	1.670

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.721
	Tpaths_d	.431
	AvgPL_d	.629
	AvgGL_d	.599

a. Dependent Variable: SMSP\_d

b. Predictors in the Model: (Constant), TSpats\_d



**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpaths_d
1	1	1.995	1.000	.00	.00
	2	.005	19.278	1.00	1.00

a. Dependent Variable: SMSP\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00431350758 2992	.01777275837 9579	.00910126565 9136	.00466686938 1646
Std. Predicted Value	-2.874	1.858	.000	1.000
Standard Error of Predicted Value	.002	.005	.002	.001
Adjusted Predicted Value	- .00487681990 4894	.01748445257 5445	.00907336332 0003	.00468359746 1245
Residual	- .01263253577 0535	.09036391973 4955	.00000000000 0000	.01424363069 6105
Std. Residual	-.882	6.308	.000	.994
Stud. Residual	-.893	6.344	.001	1.005

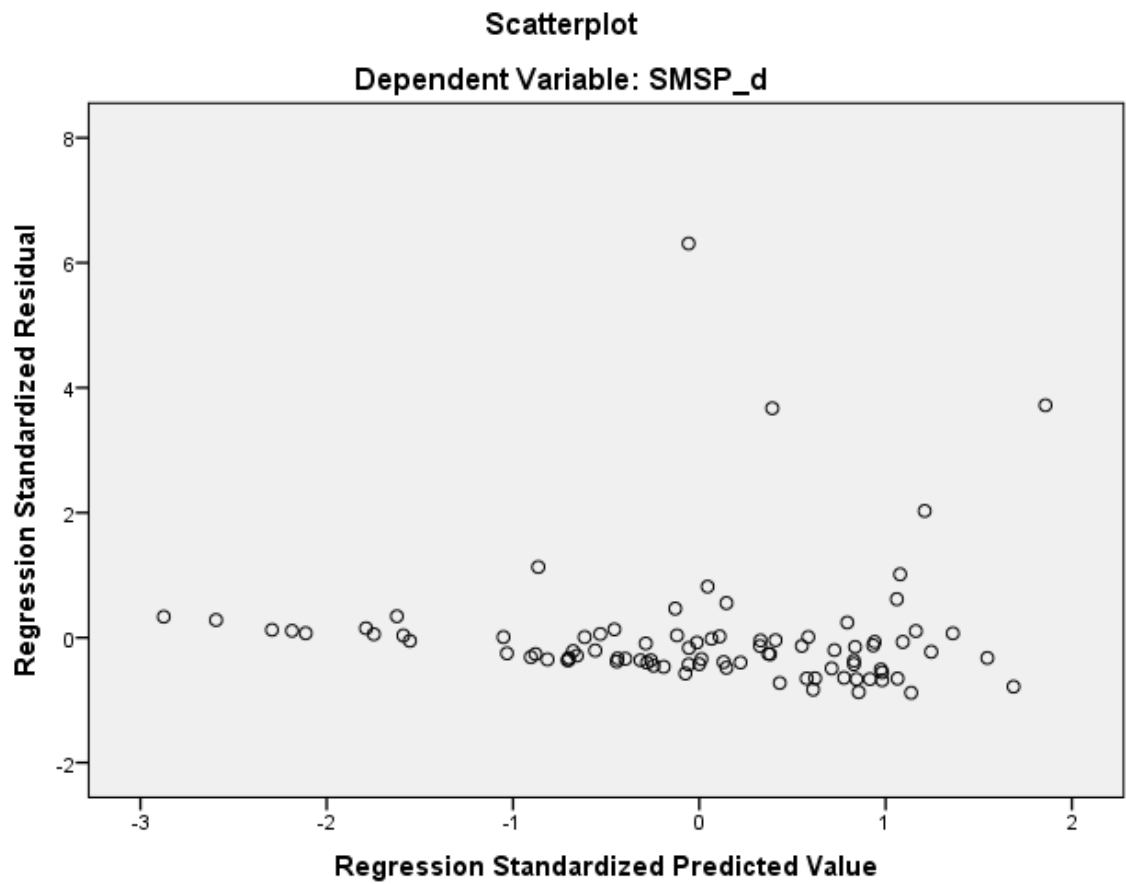
Deleted Residual	- .01296878140 4197	.09139423817 3962	.00002790233 9133	.01454206905 1890
Stud. Deleted Residual	-.892	8.604	.035	1.204
Mahal. Distance	.000	8.263	.989	1.485
Cook's Distance	.000	.387	.011	.048
Centered Leverage Value	.000	.094	.011	.017

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	89
Std. Predicted Value	89
Standard Error of Predicted Value	89
Adjusted Predicted Value	89
Residual	89
Std. Residual	89
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	89
Cook's Distance	89
Centered Leverage Value	89

a. Dependent Variable: SMSP\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT GD_d

/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:10:28	
Comments			
Input	Active Dataset	DataSet3	
	Filter	<none>	
	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File	91	

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION
		/MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT GD_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.22
	Memory Required	5920 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_1	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	PL_TpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: GD\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.413 <sup>a</sup>	.171	.162	.00305955587 0930
2	.470 <sup>b</sup>	.221	.204	.00298182998 9250

a. Predictors: (Constant), R\_con

b. Predictors: (Constant), R\_con, PL\_TpinN

c. Dependent Variable: GD\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	18.343	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	12.506	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			

a. Dependent Variable: GD\_d

b. Predictors: (Constant), R\_con

c. Predictors: (Constant), R\_con, PL\_TpinN

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	-.029	.009		-3.090	.003
	R_con	3.595	.839	.413	4.283	.000
2	(Constant)	-.017	.010		-1.657	.101
	R_con	2.871	.872	.330	3.291	.001
	PL_TpinN	-.330	.138	-.240	-2.388	.019

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_con	1.000	1.000
2	(Constant)		
	R_con	.879	1.137
	PL_TpinN	.879	1.137

a. Dependent Variable: GD\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	-.240 <sup>b</sup>	-2.388	.019	-.247	.879	1.137



	PL_TSpinN	-.092 <sup>b</sup>	-.838	.404	-.089	.783	1.277
	S_con	-.116 <sup>b</sup>	-1.027	.307	-.109	.726	1.378
	SMSP_d	-.057 <sup>b</sup>	-.587	.559	-.062	.981	1.019
2	PL_TSpinN	-.044 <sup>c</sup>	-.408	.684	-.044	.754	1.327
	S_con	-.144 <sup>c</sup>	-1.306	.195	-.139	.718	1.392
	SMSP_d	-.058 <sup>c</sup>	-.609	.544	-.065	.981	1.019

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.879
	PL_TSpinN	.783
	S_con	.726
	SMSP_d	.981
2	PL_TSpinN	.739
	S_con	.678
	SMSP_d	.864

a. Dependent Variable: GD\_d

b. Predictors in the Model: (Constant), R\_con

c. Predictors in the Model: (Constant), R\_con, PL\_TpinN

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_con	PL_TpinN
1	1	1.999	1.000	.00	.00	
	2	.001	57.536	1.00	1.00	
2	1	2.967	1.000	.00	.00	.00
	2	.033	9.484	.00	.01	.82
	3	.000	77.115	1.00	.99	.18

a. Dependent Variable: GD\_d

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00770318787 5450	.01537787728 0116	.01098901098 9011	.00157194307 7505
Std. Predicted Value	-2.090	2.792	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00712000671 7741	.01604881510 1385	.01096532968 2906	.00163669661 9003
Residual	- .00562228402 1229	.01234625838 6970	.00000000000 0000	.00294851240 7340
Std. Residual	-1.886	4.140	.000	.989

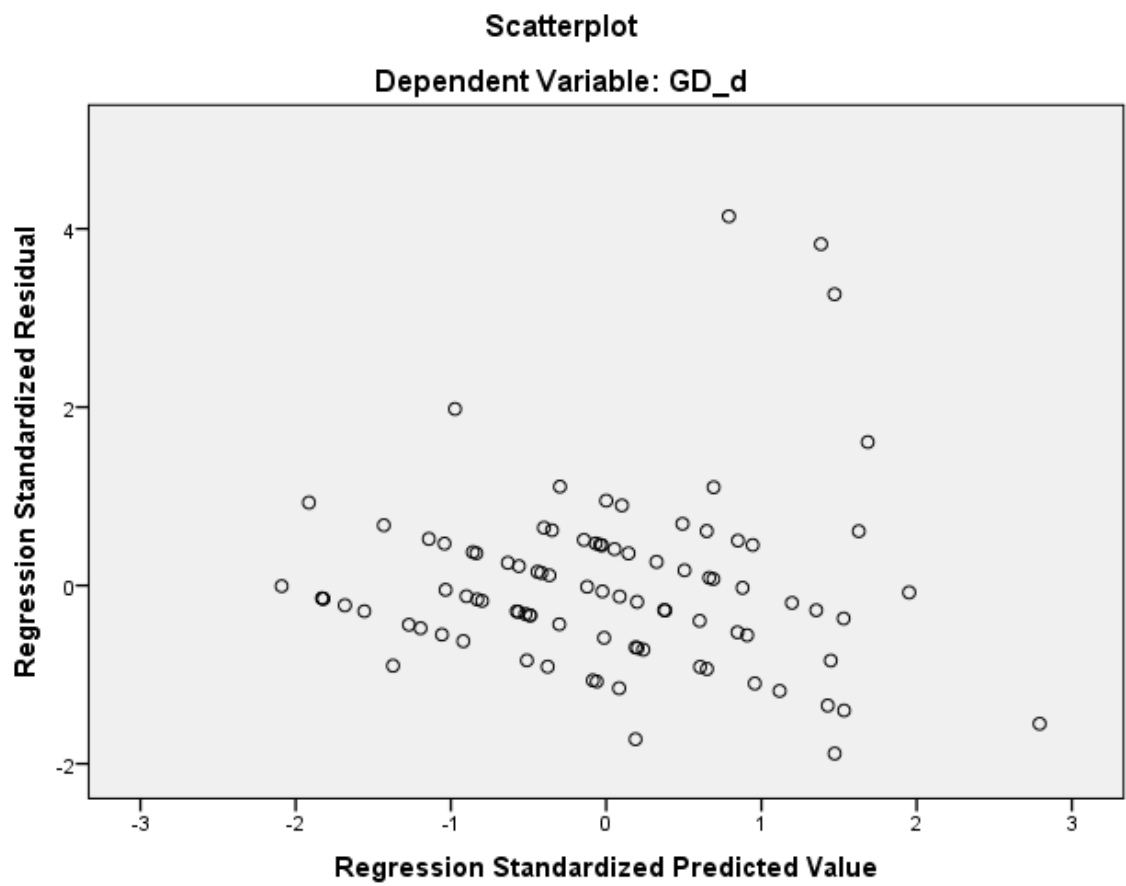
Stud. Residual	-1.921	4.193	.004	1.013
Deleted Residual	-	.01265913713	.00002368130	.00310337861
	.00583483697	7234	6105	0985
	8465			
Stud. Deleted Residual	-1.951	4.660	.015	1.062
Mahal. Distance	.005	24.545	1.978	3.218
Cook's Distance	.000	.722	.019	.081
Centered Leverage Value	.000	.273	.022	.036

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: GD\_d

## Charts



REGRESSION

```

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Tpaths_d
/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:10:56
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT Tpaths_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.22
	Memory Required	5952 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_2	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	PL_TpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	PL_TSpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: Tpaths\_d

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527 <sup>a</sup>	.278	.270	.00328796597 2243
2	.636 <sup>b</sup>	.405	.391	.00300239387 7856
3	.656 <sup>c</sup>	.431	.411	.00295286590 9735

a. Predictors: (Constant), PL\_TpinN

b. Predictors: (Constant), PL\_TpinN, R\_con

c. Predictors: (Constant), PL\_TpinN, R\_con, PL\_TSpinN

d. Dependent Variable: Tpaths\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	34.250	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.001	2	.000	29.906	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			



3	Regression	.001	3	.000	21.937	.000 <sup>d</sup>
	Residual	.001	87	.000		
	Total	.001	90			

- a. Dependent Variable: Tpaths\_d
- b. Predictors: (Constant), PL\_TpinN
- c. Predictors: (Constant), PL\_TpinN, R\_con
- d. Predictors: (Constant), PL\_TpinN, R\_con, PL\_TSpinN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.020	.002		12.552	.000
	PL_TpinN	-.836	.143	-.527	-5.852	.000
2	(Constant)	-.024	.010		-2.323	.022
	PL_TpinN	-.627	.139	-.395	-4.506	.000
	R_con	3.802	.878	.380	4.328	.000
3	(Constant)	-.014	.011		-1.227	.223
	PL_TpinN	-.574	.139	-.362	-4.112	.000
	R_con	3.052	.942	.305	3.240	.002
	PL_TSpinN	-.217	.109	-.186	-1.994	.049

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpinN	1.000	1.000
2	(Constant)		
	PL_TpinN	.879	1.137
	R_con	.879	1.137
3	(Constant)		
	PL_TpinN	.847	1.181
	R_con	.739	1.353
	PL_TSpinN	.754	1.327

a. Dependent Variable: Tpaths\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpinN	-.306 <sup>b</sup>	-3.406	.001	-.341	.897	1.115
	S_con	.158 <sup>b</sup>	1.714	.090	.180	.931	1.074
	R_con	.380 <sup>b</sup>	4.328	.000	.419	.879	1.137

	SMSP_d	-.118 <sup>b</sup>	-1.313	.192	-.139	.998	1.002
2	PL_TSpinN	-.186 <sup>c</sup>	-1.994	.049	-.209	.754	1.327
	S_con	-.023 <sup>c</sup>	-.240	.811	-.026	.718	1.392
	SMSP_d	-.073 <sup>c</sup>	-.876	.384	-.093	.981	1.019
3	S_con	-.021 <sup>d</sup>	-.221	.826	-.024	.718	1.392
	SMSP_d	-.019 <sup>d</sup>	-.223	.824	-.024	.867	1.154

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpinN	.897
	S_con	.931
	R_con	.879
	SMSP_d	.998
2	PL_TSpinN	.739
	S_con	.678
	SMSP_d	.864
3	S_con	.590
	SMSP_d	.666

a. Dependent Variable: Tpaths\_d

b. Predictors in the Model: (Constant), PL\_TpinN

c. Predictors in the Model: (Constant), PL\_TpinN, R\_con

d. Predictors in the Model: (Constant), PL\_TpinN, R\_con, PL\_TSpinN

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpinN	R_con
1	1	1.977	1.000	.01	.01	
	2	.023	9.220	.99	.99	
2	1	2.967	1.000	.00	.00	.00
	2	.033	9.484	.00	.82	.01
	3	.000	77.115	1.00	.18	.99
3	1	3.908	1.000	.00	.00	.00
	2	.059	8.113	.00	.01	.00
	3	.032	11.100	.00	.91	.00
	4	.000	97.786	1.00	.08	.99

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		PL_TSpinN
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.75
	3	.07
	4	.18

a. Dependent Variable: Tpaths\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00521285831 9283	.01694374904 0365	.01098901098 9011	.00252506560 6504
Std. Predicted Value	-2.288	2.358	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00504877278 5813	.01744898408 6514	.01096697363 8078	.00262265609 4474
Residual	- .00494421878 8296	.01684025116 2648	.00000000000 0000	.00290323437 6492
Std. Residual	-1.674	5.703	.000	.983
Stud. Residual	-1.719	5.786	.003	1.015
Deleted Residual	- .00541304657 2357	.01733161136 5080	.00002203735 0933	.00310541497 6193

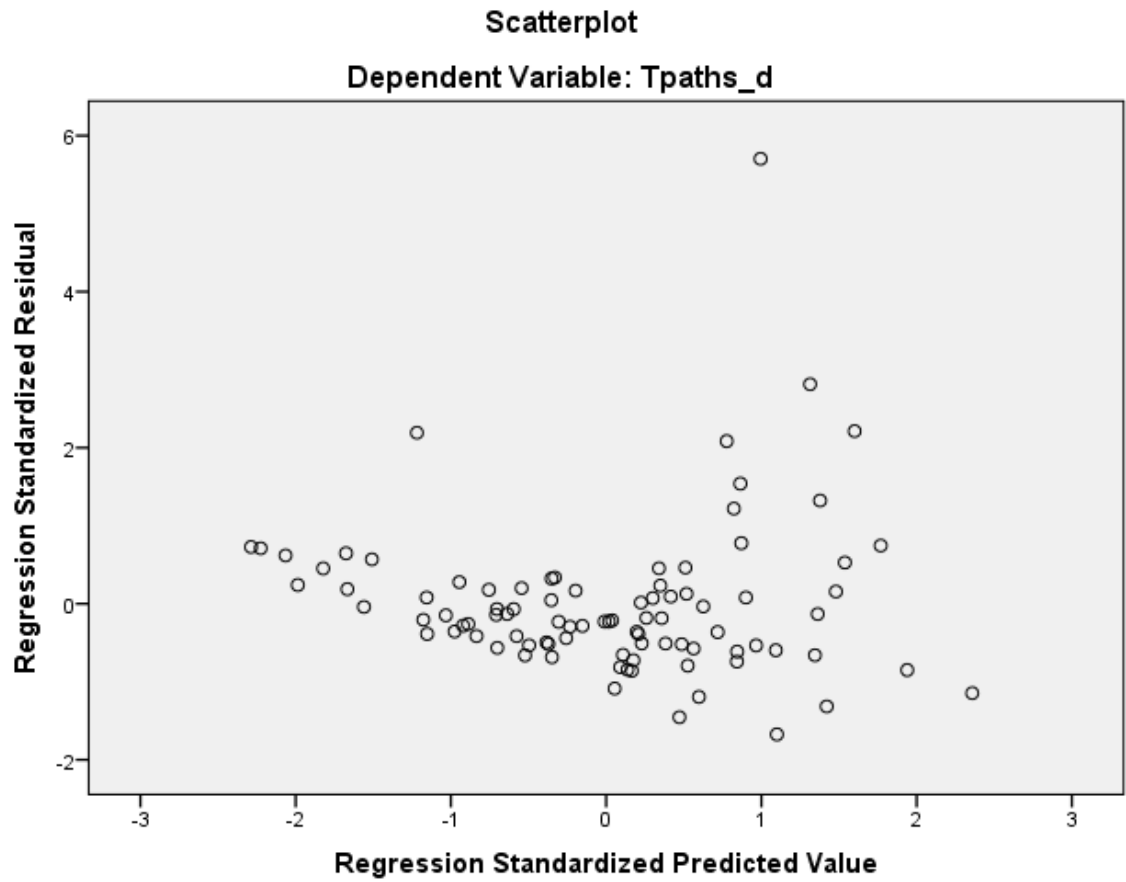
Stud. Deleted Residual	-1.739	7.334	.024	1.129
Mahal. Distance	.151	26.047	2.967	4.215
Cook's Distance	.000	.737	.019	.083
Centered Leverage Value	.002	.289	.033	.047

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: Tpaths\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

```

/DEPENDENT TSpats_d

/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:11:17
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.



Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.
		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT TSpaths_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.19
	Memory Required	6000 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_3	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	PL_TSpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	PL_TpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: TSpaths\_d

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523 <sup>a</sup>	.273	.265	.00100170946 3297
2	.608 <sup>b</sup>	.370	.355	.00093823137 6568
3	.654 <sup>c</sup>	.427	.408	.00089932275 5203
4	.681 <sup>d</sup>	.464	.439	.00087512733 9243

a. Predictors: (Constant), PL\_TSpinN

b. Predictors: (Constant), PL\_TSpinN, R\_con

c. Predictors: (Constant), PL\_TSpinN, R\_con, PL\_TpinN

d. Predictors: (Constant), PL\_TSpinN, R\_con, PL\_TpinN, SMSP\_d

e. Dependent Variable: TSpaths\_d

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.000	1	.000	33.462	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	25.797	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	21.645	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.000	90			
4	Regression	.000	4	.000	18.613	.000 <sup>e</sup>
	Residual	.000	86	.000		
	Total	.000	90			

a. Dependent Variable: TSpats\_d

b. Predictors: (Constant), PL\_TSpinN

c. Predictors: (Constant), PL\_TSpinN, R\_con

d. Predictors: (Constant), PL\_TSpinN, R\_con, PL\_TpinN

e. Predictors: (Constant), PL\_TSpinN, R\_con, PL\_TpinN, SMSP\_d

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.013	.000		35.471	.000
	PL_TSpinN	-.185	.032	-.523	-5.785	.000
2	(Constant)	.001	.003		.196	.845
	PL_TSpinN	-.127	.034	-.359	-3.755	.000
	R_con	1.067	.291	.351	3.667	.000
3	(Constant)	.004	.003		1.174	.243
	PL_TSpinN	-.108	.033	-.306	-3.275	.002
	R_con	.866	.287	.285	3.019	.003
	PL_TpinN	-.126	.042	-.261	-2.963	.004
4	(Constant)	.004	.003		1.132	.261
	PL_TSpinN	-.080	.034	-.226	-2.334	.022
	R_con	.878	.279	.289	3.144	.002
	PL_TpinN	-.133	.041	-.276	-3.213	.002
	SMSP_d	-.010	.004	-.206	-2.424	.017

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TSpinN	1.000	1.000
2	(Constant)		
	PL_TSpinN	.783	1.277

	R_con	.783	1.277
3	(Constant)		
	PL_TSpinN	.754	1.327
	R_con	.739	1.353
	PL_TpinN	.847	1.181
4	(Constant)		
	PL_TSpinN	.666	1.502
	R_con	.739	1.353
	PL_TpinN	.842	1.187
	SMSP_d	.867	1.154

a. Dependent Variable: TSpaths\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	-.324 <sup>b</sup>	-3.619	.000	-.360	.897	1.115
	S_con	.288 <sup>b</sup>	3.252	.002	.328	.937	1.067
	R_con	.351 <sup>b</sup>	3.667	.000	.364	.783	1.277
	SMSP_d	-.174 <sup>b</sup>	-1.820	.072	-.190	.872	1.147
2	PL_TpinN	-.261 <sup>c</sup>	-2.963	.004	-.303	.847	1.181
	S_con	.176 <sup>c</sup>	1.790	.077	.188	.726	1.378

	SMSP_d	-.186 <sup>c</sup>	-2.088	.040	-.218	.871	1.148
3	S_con	.149 <sup>d</sup>	1.566	.121	.167	.718	1.392
	SMSP_d	-.206 <sup>d</sup>	-2.424	.017	-.253	.867	1.154
4	S_con	.138 <sup>e</sup>	1.486	.141	.159	.716	1.396

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.897
	S_con	.937
	R_con	.783
	SMSP_d	.872
2	PL_TpinN	.739
	S_con	.606
	SMSP_d	.695
3	S_con	.590
	SMSP_d	.666
4	S_con	.589

a. Dependent Variable: TSpaths\_d

b. Predictors in the Model: (Constant), PL\_TSpinN

c. Predictors in the Model: (Constant), PL\_TSpinN, R\_con

d. Predictors in the Model: (Constant), PL\_TSpinN, R\_con, PL\_TpinN

e. Predictors in the Model: (Constant), PL\_TSpinN, R\_con, PL\_TpinN, SMSP\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TSpinN	R_con
1	1	1.958	1.000	.02	.02	
	2	.042	6.847	.98	.98	
2	1	2.941	1.000	.00	.01	.00
	2	.059	7.062	.00	.73	.00
	3	.000	81.211	1.00	.26	1.00
3	1	3.908	1.000	.00	.00	.00
	2	.059	8.113	.00	.75	.00
	3	.032	11.100	.00	.07	.00
	4	.000	97.786	1.00	.18	.99
4	1	4.148	1.000	.00	.00	.00
	2	.767	2.325	.00	.00	.00
	3	.053	8.877	.00	.74	.00
	4	.031	11.480	.00	.09	.00
	5	.000	100.771	1.00	.17	.99

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions
-------	-----------	----------------------



		PL_TpinN	SMSP_d
1	1		
	2		
2	1		
	2		
	3		
3	1	.00	
	2	.01	
	3	.91	
	4	.08	
4	1	.00	.01
	2	.00	.86
	3	.00	.12
	4	.91	.01
	5	.08	.00

a. Dependent Variable: TSpaths\_d

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00777862546 9655	.01279067341 2383	.01098901098 9011	.00079595156 3301

Std. Predicted Value	-4.033	2.264	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00566761428 4903	.01283744443 2080	.01096242196 9315	.00093177333 1889
Residual	- .00172946765 0875	.00251086498 6107	.00000000000 0000	.00085545904 4741
Std. Residual	-1.976	2.869	.000	.978
Stud. Residual	-2.285	3.433	.012	1.037
Deleted Residual	- .00231190631 1661	.00359467533 4170	.00002658901 9696	.00099162487 8227
Stud. Deleted Residual	-2.344	3.674	.018	1.056
Mahal. Distance	.151	57.184	3.956	7.249
Cook's Distance	.000	1.800	.041	.218
Centered Leverage Value	.002	.635	.044	.081

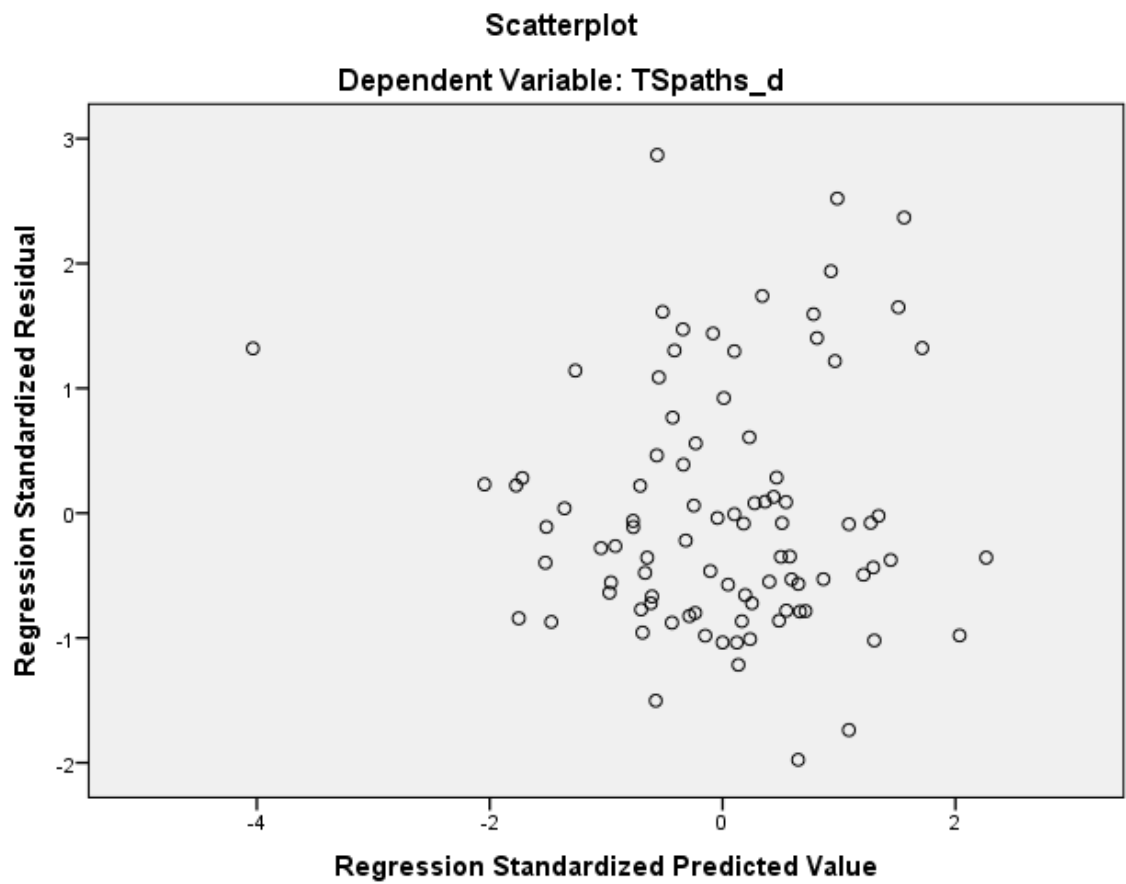
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91

Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: TSpats\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgPL\_d

/METHOD=STEPWISE PL\_TpinN PL\_TSpinN S\_con R\_con SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgPL_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.19
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	PL_TpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgPL\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.491 <sup>a</sup>	.241	.232	.00402399642 8294
2	.592 <sup>b</sup>	.351	.336	.00374166577 1485

a. Predictors: (Constant), PL\_TpinN

b. Predictors: (Constant), PL\_TpinN, R\_con

c. Dependent Variable: AvgPL\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	28.223	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	23.791	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), PL\_TpinN

c. Predictors: (Constant), PL\_TpinN, R\_con

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.021	.002		10.774	.000



	PL_TpinN	-.929	.175	-.491	-5.313	.000
2	(Constant)	-.028	.013		-2.172	.033
	PL_TpinN	-.696	.173	-.368	-4.015	.000
	R_con	4.231	1.095	.354	3.865	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpinN	1.000	1.000
2	(Constant)		
	PL_TpinN	.879	1.137
	R_con	.879	1.137

a. Dependent Variable: AvgPL\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpinN	-.207 <sup>b</sup>	-2.163	.033	-.225	.897	1.115
	S_con	.043 <sup>b</sup>	.444	.658	.047	.931	1.074
	R_con	.354 <sup>b</sup>	3.865	.000	.381	.879	1.137

	SMSP_d	-.051 <sup>b</sup>	-.553	.582	-.059	.998	1.002
2	PL_TSpinN	-.079 <sup>c</sup>	-.802	.425	-.086	.754	1.327
	S_con	-.158 <sup>c</sup>	-1.570	.120	-.166	.718	1.392
	SMSP_d	-.008 <sup>c</sup>	-.095	.925	-.010	.981	1.019

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpinN	.897
	S_con	.931
	R_con	.879
	SMSP_d	.998
2	PL_TSpinN	.739
	S_con	.678
	SMSP_d	.864

a. Dependent Variable: AvgPL\_d

b. Predictors in the Model: (Constant), PL\_TpinN

c. Predictors in the Model: (Constant), PL\_TpinN, R\_con

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	PL_TpinN	R_con
1	1	1.977	1.000	.01	.01	
	2	.023	9.220	.99	.99	
2	1	2.967	1.000	.00	.00	.00
	2	.033	9.484	.00	.82	.01
	3	.000	77.115	1.00	.18	.99

a. Dependent Variable: AvgPL\_d

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00513063184 9170	.01798471994 6980	.01098901098 9011	.00272057946 5441
Std. Predicted Value	-2.153	2.571	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00254631158 8958	.01898801699 2807	.01095060345 2831	.00285147280 0801
Residual	- .00691635347 9028	.01511801127 3444	.00000000000 0000	.00369985813 7828
Std. Residual	-1.848	4.040	.000	.989
Stud. Residual	-1.978	4.091	.005	1.022

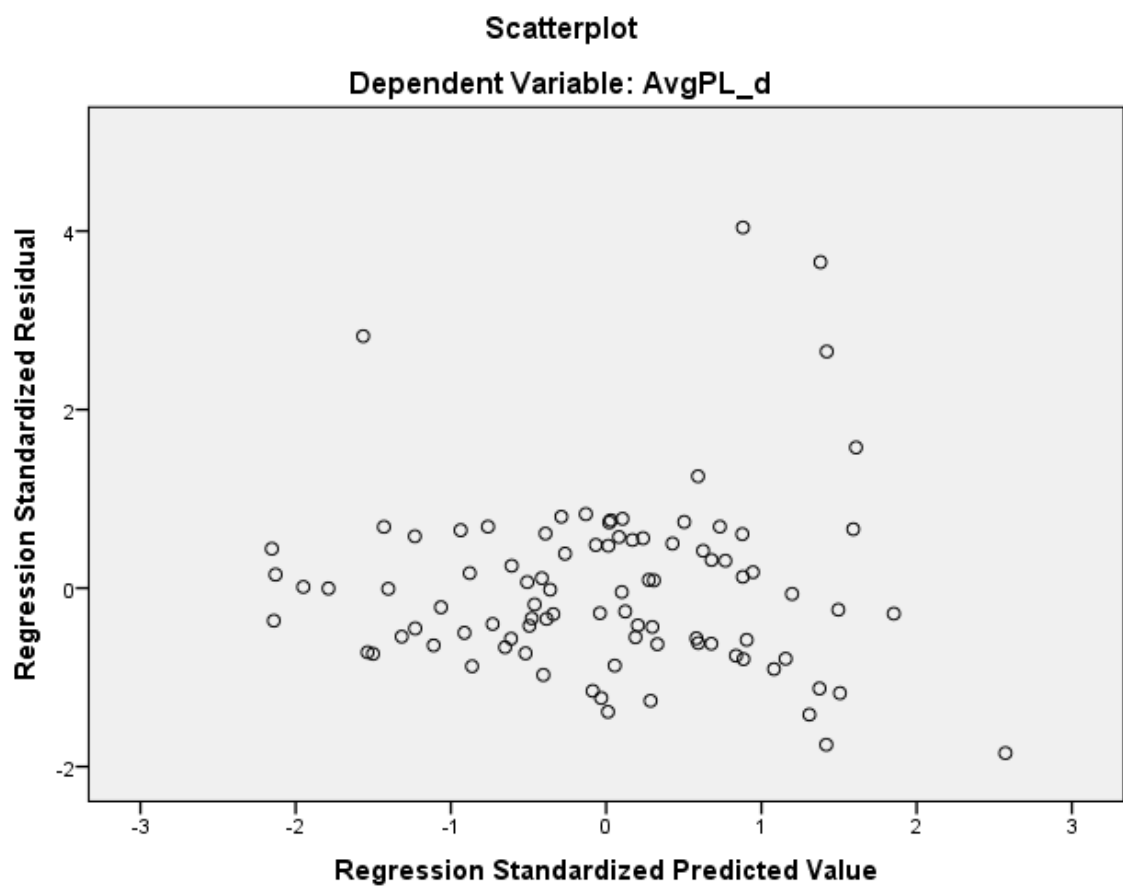
Deleted Residual	- .00791965145 6177	.01550113130 3608	.00003840753 6180	.00397012125 7255
Stud. Deleted Residual	-2.012	4.521	.016	1.066
Mahal. Distance	.005	24.545	1.978	3.218
Cook's Distance	.000	1.470	.027	.156
Centered Leverage Value	.000	.273	.022	.036

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: AvgPL\_d

## Charts



REGRESSION

/MISSING LISTWISE

```

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT AvgGL_d
/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/SAVE COOK.

```

## Regression

### Notes

Output Created	31-MAY-2015 10:12:03	
Comments		
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	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgGL_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Memory Required	6080 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_5	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgGL\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.294 <sup>a</sup>	.086	.076	.00341299182 8797

a. Predictors: (Constant), R\_con

b. Dependent Variable: AvgGL\_d

**ANOVA<sup>a</sup>**



Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	8.411	.005 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: AvgGL\_d

b. Predictors: (Constant), R\_con

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.019	.010		-1.831	.070
	R_con	2.716	.936	.294	2.900	.005

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_con	1.000	1.000

a. Dependent Variable: AvgGL\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	-.125 <sup>b</sup>	-1.160	.249	-.123	.879	1.137
	PL_TSpinN	-.195 <sup>b</sup>	-1.722	.089	-.181	.783	1.277
	S_con	-.121 <sup>b</sup>	-1.018	.312	-.108	.726	1.378
	SMSP_d	-.174 <sup>b</sup>	-1.715	.090	-.180	.981	1.019

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.879
	PL_TSpinN	.783
	S_con	.726
	SMSP_d	.981

a. Dependent Variable: AvgGL\_d

b. Predictors in the Model: (Constant), R\_con

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_con
1	1	1.999	1.000	.00	.00
	2	.001	57.536	1.00	1.00

a. Dependent Variable: AvgGL\_d

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00890951324 2543	.01435462944 2096	.01098901098 9011	.00104339604 2897
Std. Predicted Value	-1.993	3.226	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00895345583 5581	.01512362714 8569	.01099596046 6394	.00107454340 2270
Residual	- .00530536519 3635	.01248252298 6829	.00000000000 0000	.00339397779 8797
Std. Residual	-1.554	3.657	.000	.994
Stud. Residual	-1.663	3.691	-.001	1.007
Deleted Residual	- .00607436290 0108	.01271156407 8927	- .00000694947 7383	.00347964468 4349

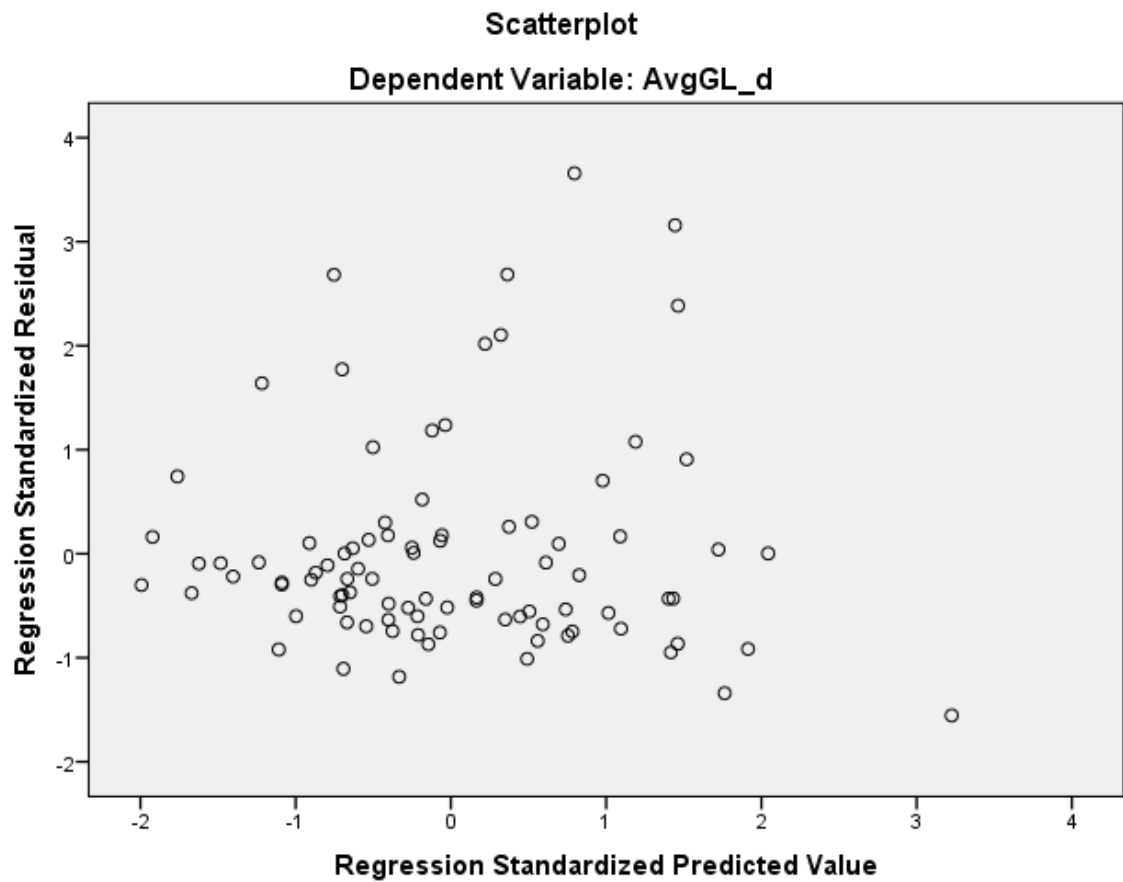
Stud. Deleted Residual	-1.680	3.988	.009	1.036
Mahal. Distance	.001	10.405	.989	1.441
Cook's Distance	.000	.201	.013	.033
Centered Leverage Value	.000	.116	.011	.016

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: AvgGL\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgPL\_d

/METHOD=STEPWISE PL\_TpinN PL\_TSpinN S\_con R\_con SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

		Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax			REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgPL_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time		00:00:00.19
	Elapsed Time		00:00:00.23
	Memory Required		6112 bytes
	Additional Memory Required for Residual Plots		0 bytes
Variables Created or Modified	COO_6		Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	PL_TpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgPL\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.613 <sup>a</sup>	.376	.369	.003630378607428
2	.649 <sup>b</sup>	.421	.407	.003517034258830



a. Predictors: (Constant), PL\_TpinN

b. Predictors: (Constant), PL\_TpinN, R\_con

c. Dependent Variable: AvgPL\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	52.968	.000 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.002	89			
2	Regression	.001	2	.000	31.600	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), PL\_TpinN

c. Predictors: (Constant), PL\_TpinN, R\_con

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.025	.002		12.799	.000
	PL_TpinN	-1.263	.174	-.613	-7.278	.000
2	(Constant)	-.009	.013		-.699	.487
	PL_TpinN	-1.037	.189	-.503	-5.482	.000
	R_con	2.859	1.099	.239	2.601	.011

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpinN	1.000	1.000
2	(Constant)		
	PL_TpinN	.790	1.267
	R_con	.790	1.267

a. Dependent Variable: AvgPL\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpinN	-.105 <sup>b</sup>	-1.140	.257	-.121	.839	1.192

	S_con	-.003 <sup>b</sup>	-.039	.969	-.004	.919	1.088
	R_con	.239 <sup>b</sup>	2.601	.011	.269	.790	1.267
	SMSP_d	-.029 <sup>b</sup>	-.338	.737	-.036	.996	1.004
2	PL_TSpinN	-.030 <sup>c</sup>	-.315	.753	-.034	.744	1.345
	S_con	-.138 <sup>c</sup>	-1.441	.153	-.154	.715	1.398
	SMSP_d	-.004 <sup>c</sup>	-.047	.963	-.005	.982	1.018

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpinN	.839
	S_con	.919
	R_con	.790
	SMSP_d	.996
2	PL_TSpinN	.700
	S_con	.615
	SMSP_d	.779

a. Dependent Variable: AvgPL\_d

b. Predictors in the Model: (Constant), PL\_TpinN

c. Predictors in the Model: (Constant), PL\_TpinN, R\_con

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpinN	R_con
1	1	1.980	1.000	.01	.01	
	2	.020	9.972	.99	.99	
2	1	2.971	1.000	.00	.00	.00
	2	.029	10.126	.00	.72	.01
	3	.000	82.966	1.00	.28	.99

a. Dependent Variable: AvgPL\_d

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00259095616 6387	.01698022335 7677	.01091891939 9857	.00296375116 3210
Std. Predicted Value	-2.810	2.045	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00234472705 0513	.01788836531 3411	.01090454515 4013	.00303192892 5724
Residual	- .00635735690 5937	.01453171297 9078	.00000000000 0000	.00347729248 2951
Std. Residual	-1.808	4.132	.000	.989

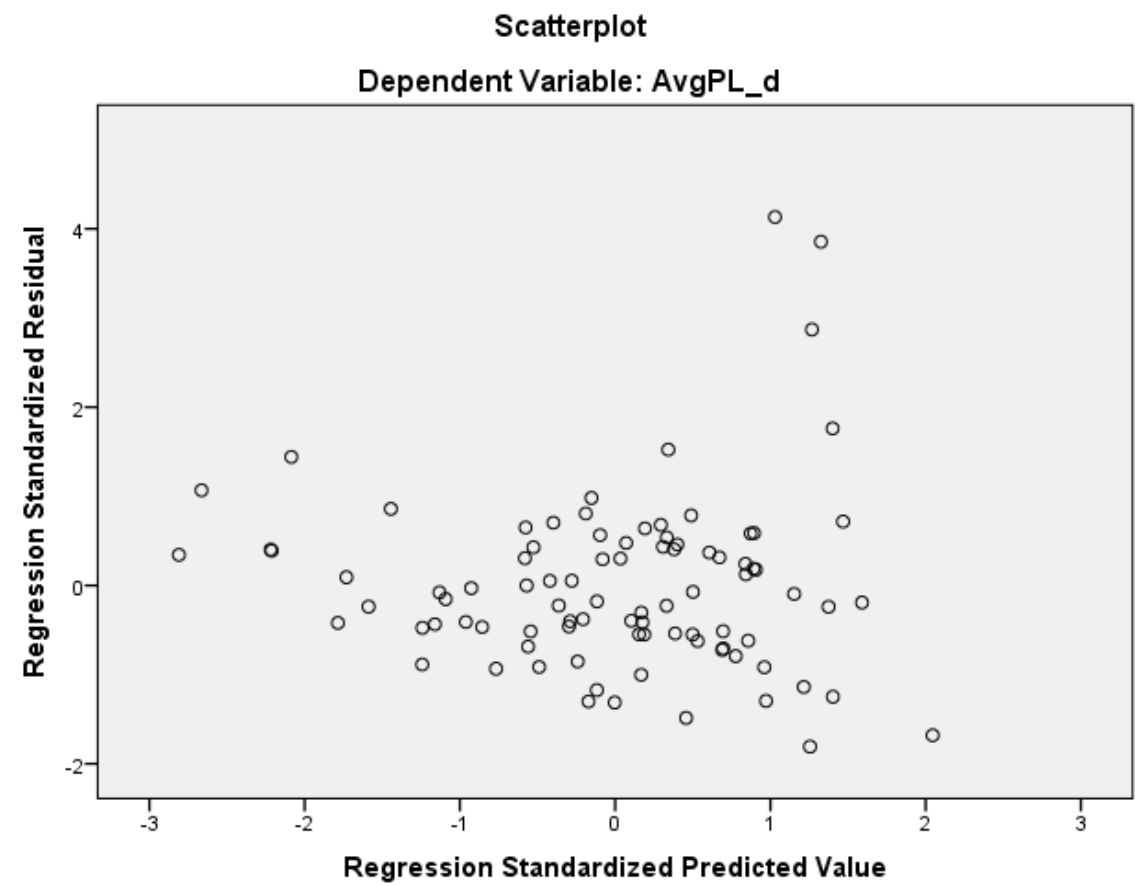
Stud. Residual	-1.842	4.189	.002	1.009
Deleted Residual	-	.01493374630	.00001437424	.00362283682
	.00681999931	8088	5844	5269
	1119			
Stud. Deleted Residual	-1.868	4.661	.013	1.055
Mahal. Distance	.011	16.050	1.978	2.732
Cook's Distance	.000	.203	.014	.038
Centered Leverage Value	.000	.180	.022	.031

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: AvgPL\_d

Charts



REGRESSION

```

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT TSpahs_d
/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:13:26
Comments		
Input	Active Dataset	DataSet3
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	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	89
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT TSpaths_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.18
	Memory Required	6160 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance



# **Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	PL_TpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	PL_TSpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

4	S_con	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	-------	---

a. Dependent Variable: TSpats\_d

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.607 <sup>a</sup>	.369	.362	.00091094175 1543
2	.664 <sup>b</sup>	.441	.428	.00086240413 3744
3	.707 <sup>c</sup>	.500	.483	.00082018451 4908
4	.734 <sup>d</sup>	.538	.516	.00079308564 8355

a. Predictors: (Constant), PL\_TpinN

b. Predictors: (Constant), PL\_TpinN, SMSP\_d

c. Predictors: (Constant), PL\_TpinN, SMSP\_d, PL\_TSpinN

d. Predictors: (Constant), PL\_TpinN, SMSP\_d, PL\_TSpinN, S\_con

e. Dependent Variable: TSpats\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	50.857	.000 <sup>b</sup>
	Residual	.000	87	.000		
	Total	.000	88			
2	Regression	.000	2	.000	33.906	.000 <sup>c</sup>
	Residual	.000	86	.000		
	Total	.000	88			
3	Regression	.000	3	.000	28.351	.000 <sup>d</sup>
	Residual	.000	85	.000		
	Total	.000	88			
4	Regression	.000	4	.000	24.468	.000 <sup>e</sup>
	Residual	.000	84	.000		
	Total	.000	88			

a. Dependent Variable: TSpats\_d

b. Predictors: (Constant), PL\_TpinN

c. Predictors: (Constant), PL\_TpinN, SMSP\_d

d. Predictors: (Constant), PL\_TpinN, SMSP\_d, PL\_TSpinN

e. Predictors: (Constant), PL\_TpinN, SMSP\_d, PL\_TSpinN, S\_con

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.014	.000		29.713	.000
	PL_TpinN	-.311	.044	-.607	-7.131	.000
2	(Constant)	.014	.000		31.505	.000
	PL_TpinN	-.300	.041	-.587	-7.254	.000
	SMSP_d	-.020	.006	-.269	-3.327	.001
3	(Constant)	.015	.000		32.453	.000
	PL_TpinN	-.241	.043	-.472	-5.554	.000
	SMSP_d	-.020	.006	-.259	-3.370	.001
	PL_TSpinN	-.101	.032	-.270	-3.175	.002
4	(Constant)	.014	.001		27.777	.000
	PL_TpinN	-.218	.043	-.427	-5.089	.000
	SMSP_d	-.019	.006	-.249	-3.348	.001
	PL_TSpinN	-.090	.031	-.240	-2.895	.005
	S_con	.027	.010	.205	2.628	.010

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpinN	1.000	1.000
2	(Constant)		
	PL_TpinN	.994	1.006
	SMSP_d	.994	1.006
3	(Constant)		
	PL_TpinN	.814	1.228
	SMSP_d	.992	1.008
	PL_TSpinN	.815	1.226
4	(Constant)		
	PL_TpinN	.781	1.281
	SMSP_d	.990	1.010
	PL_TSpinN	.800	1.250
	S_con	.899	1.112

a. Dependent Variable: TSpats\_d

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
-------	---------	---	------	---------	-------------------------

					Correlation	Tolerance	VIF
1	PL_TSpinN	-.281 <sup>b</sup>	-3.128	.002	-.320	.817	1.224
	S_con	.251 <sup>b</sup>	2.949	.004	.303	.919	1.088
	R_con	.273 <sup>b</sup>	2.971	.004	.305	.789	1.267
	SMSP_d	-.269 <sup>b</sup>	-3.327	.001	-.338	.994	1.006
2	PL_TSpinN	-.270 <sup>c</sup>	-3.175	.002	-.326	.815	1.226
	S_con	.236 <sup>c</sup>	2.927	.004	.303	.916	1.091
	R_con	.262 <sup>c</sup>	3.020	.003	.311	.788	1.269
3	S_con	.205 <sup>d</sup>	2.628	.010	.276	.899	1.112
	R_con	.195 <sup>d</sup>	2.184	.032	.232	.709	1.411
4	R_con	.114 <sup>e</sup>	1.156	.251	.126	.566	1.768

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpinN	.817
	S_con	.919
	R_con	.789
	SMSP_d	.994
2	PL_TSpinN	.814
	S_con	.916
	R_con	.787
3	S_con	.781

	R_con	.709
4	R_con	.566

a. Dependent Variable: TSpats\_d

b. Predictors in the Model: (Constant), PL\_TpinN

c. Predictors in the Model: (Constant), PL\_TpinN, SMSP\_d

d. Predictors in the Model: (Constant), PL\_TpinN, SMSP\_d, PL\_TSpinN

e. Predictors in the Model: (Constant), PL\_TpinN, SMSP\_d, PL\_TSpinN, S\_con

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpinN	SMSP_d
1	1	1.980	1.000	.01	.01	
	2	.020	9.915	.99	.99	
2	1	2.374	1.000	.01	.01	.07
	2	.605	1.980	.01	.01	.93
	3	.020	10.859	.99	.99	.00
3	1	3.293	1.000	.00	.00	.03
	2	.647	2.255	.00	.00	.97
	3	.040	9.105	.21	.09	.00
	4	.020	12.854	.79	.90	.00
4	1	3.905	1.000	.00	.00	.02

2	.692	2.376	.00	.00	.90
3	.349	3.345	.00	.01	.08
4	.037	10.286	.11	.18	.00
5	.017	15.218	.88	.81	.00

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions	
		PL_TSpinN	S_con
1	1		
	2		
2	1		
	2		
	3		
3	1	.01	
	2	.00	
	3	.97	
	4	.02	
4	1	.00	.02
	2	.00	.05
	3	.02	.70
	4	.97	.06
	5	.00	.17



a. Dependent Variable: TSpaths\_d

**Residuals Statistics<sup>a</sup>**

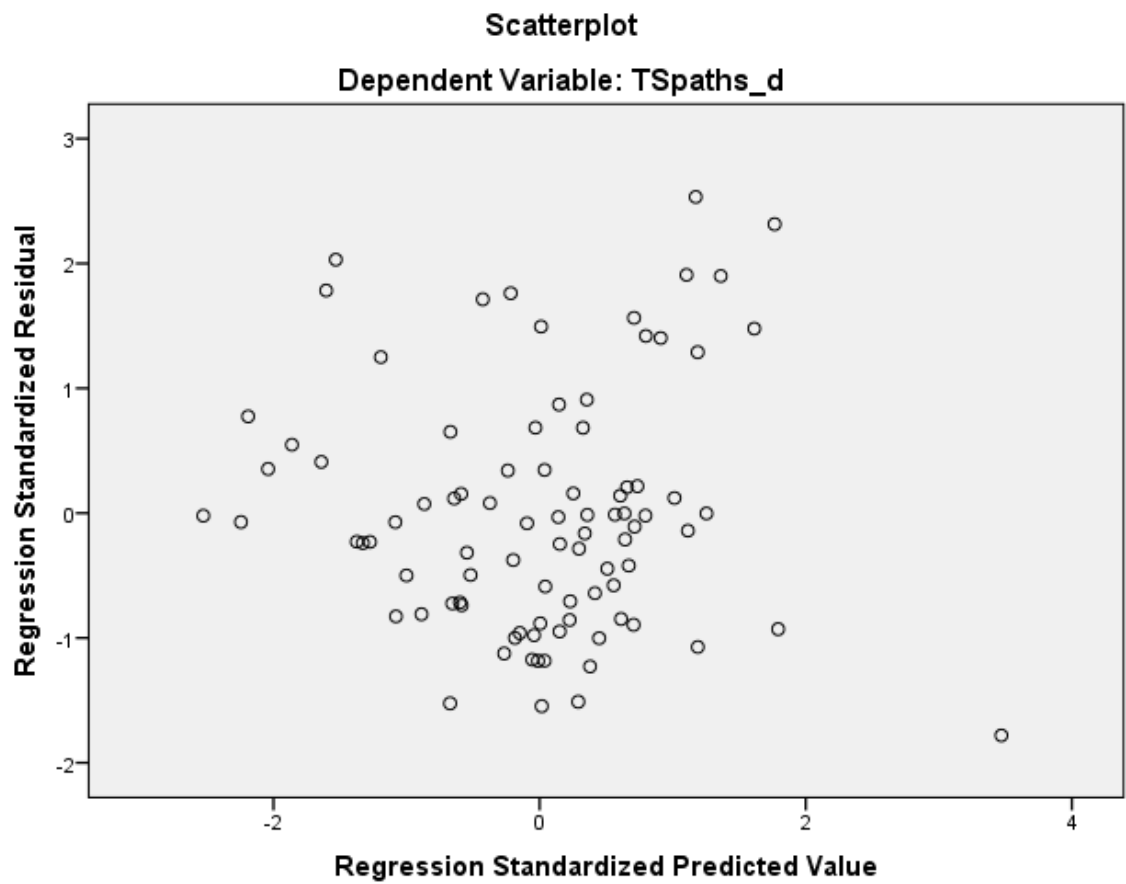
	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00887466222 0478	.01389072742 3131	.01098891255 1535	.00083639605 4702
Std. Predicted Value	-2.528	3.469	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00855760090 0531	.01917329989 3737	.01103598020 2036	.00119384009 9933
Residual	- .00141191598 9593	.00200900249 1832	.00000000000 0000	.00077485135 6953
Std. Residual	-1.780	2.533	.000	.977
Stud. Residual	-3.877	2.574	-.017	1.080
Deleted Residual	- .00669448915 8690	.00250376597 9782	- .00004706765 0502	.00109555043 6669
Stud. Deleted Residual	-4.252	2.666	-.016	1.107
Mahal. Distance	.124	68.451	3.955	8.956
Cook's Distance	.000	11.245	.147	1.194
Centered Leverage Value	.001	.778	.045	.102

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	89
Std. Predicted Value	89
Standard Error of Predicted Value	89
Adjusted Predicted Value	89
Residual	89
Std. Residual	89
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	89
Cook's Distance	89
Centered Leverage Value	89

a. Dependent Variable: TSpats\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT TSpaths\_d

/METHOD=STEPWISE PL\_TpinN PL\_TSpinN S\_con R\_con SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	88
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT TSpats_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.23
	Memory Required	6192 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_8	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	PL_TpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	S_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	PL_TSpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: TSpats\_d

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.601 <sup>a</sup>	.361	.354	.00091262675 1837
2	.714 <sup>b</sup>	.510	.499	.00080399738 5157
3	.761 <sup>c</sup>	.579	.564	.00074959413 3038
4	.783 <sup>d</sup>	.613	.595	.00072296803 7589

a. Predictors: (Constant), PL\_TpinN

b. Predictors: (Constant), PL\_TpinN, S\_con

c. Predictors: (Constant), PL\_TpinN, S\_con, SMSP\_d

d. Predictors: (Constant), PL\_TpinN, S\_con, SMSP\_d, PL\_TSpinN

e. Dependent Variable: TSpats\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	48.653	.000 <sup>b</sup>
	Residual	.000	86	.000		

	Total	.000	87			
2	Regression	.000	2	.000	44.249	.000 <sup>c</sup>
	Residual	.000	85	.000		
	Total	.000	87			
3	Regression	.000	3	.000	38.532	.000 <sup>d</sup>
	Residual	.000	84	.000		
	Total	.000	87			
4	Regression	.000	4	.000	32.892	.000 <sup>e</sup>
	Residual	.000	83	.000		
	Total	.000	87			

a. Dependent Variable: TSpats\_d

b. Predictors: (Constant), PL\_TpinN

c. Predictors: (Constant), PL\_TpinN, S\_con

d. Predictors: (Constant), PL\_TpinN, S\_con, SMSP\_d

e. Predictors: (Constant), PL\_TpinN, S\_con, SMSP\_d, PL\_TSpinN

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.014	.000		29.279	.000



	PL_TpinN	-.306	.044	-.601	-6.975	.000
2	(Constant)	.012	.001		21.061	.000
	PL_TpinN	-.226	.042	-.443	-5.395	.000
	S_con	.110	.022	.417	5.080	.000
3	(Constant)	.012	.001		22.740	.000
	PL_TpinN	-.217	.039	-.426	-5.551	.000
	S_con	.109	.020	.414	5.405	.000
	SMSP_d	-.020	.005	-.263	-3.713	.000
4	(Constant)	.013	.001		23.099	.000
	PL_TpinN	-.179	.040	-.351	-4.457	.000
	S_con	.101	.020	.382	5.107	.000
	SMSP_d	-.019	.005	-.257	-3.755	.000
	PL_TSpinN	-.077	.029	-.206	-2.702	.008

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpinN	1.000	1.000
2	(Constant)		
	PL_TpinN	.856	1.169
	S_con	.856	1.169
3	(Constant)		

	PL_TpinN	.853	1.173
	S_con	.856	1.169
	SMSP_d	.995	1.005
4	(Constant)		
	PL_TpinN	.750	1.334
	S_con	.834	1.199
	SMSP_d	.994	1.006
	PL_TSpinN	.802	1.247

a. Dependent Variable: TSpaths\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpinN	-.278 <sup>b</sup>	-3.063	.003	-.315	.823	1.215
	S_con	.417 <sup>b</sup>	5.080	.000	.483	.856	1.169
	R_con	.263 <sup>b</sup>	2.830	.006	.293	.797	1.254
	SMSP_d	-.268 <sup>b</sup>	-3.273	.002	-.335	.995	1.005
2	PL_TSpinN	-.216 <sup>c</sup>	-2.634	.010	-.276	.803	1.246
	R_con	.113 <sup>c</sup>	1.231	.222	.133	.679	1.472
	SMSP_d	-.263 <sup>c</sup>	-3.713	.000	-.375	.995	1.005
3	PL_TSpinN	-.206 <sup>d</sup>	-2.702	.008	-.284	.802	1.247

	R_con	.108 <sup>d</sup>	1.265	.210	.137	.679	1.473
4	R_con	.050 <sup>e</sup>	.580	.563	.064	.627	1.594

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpinN	.823
	S_con	.856
	R_con	.797
	SMSP_d	.995
2	PL_TSpinN	.751
	R_con	.679
	SMSP_d	.853
3	PL_TSpinN	.750
	R_con	.679
4	R_con	.627

a. Dependent Variable: TSpats\_d

b. Predictors in the Model: (Constant), PL\_TpinN

c. Predictors in the Model: (Constant), PL\_TpinN, S\_con

d. Predictors in the Model: (Constant), PL\_TpinN, S\_con, SMSP\_d

e. Predictors in the Model: (Constant), PL\_TpinN, S\_con, SMSP\_d, PL\_TSpinN

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpinN	S_con
1	1	1.980	1.000	.01	.01	
	2	.020	9.950	.99	.99	
2	1	2.852	1.000	.00	.00	.01
	2	.134	4.607	.01	.08	.61
	3	.013	14.730	.99	.92	.38
3	1	3.201	1.000	.00	.00	.01
	2	.653	2.213	.00	.00	.01
	3	.133	4.913	.01	.08	.60
	4	.013	15.604	.99	.91	.38
4	1	4.117	1.000	.00	.00	.01
	2	.669	2.481	.00	.00	.01
	3	.165	4.991	.00	.02	.52
	4	.035	10.833	.05	.28	.07
	5	.013	17.813	.95	.70	.40

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions	
		SMSP_d	PL_TSpinN
1	1		

	2		
2	1		
	2		
	3		
3	1	.03	
	2	.95	
	3	.02	
	4	.00	
4	1	.02	.00
	2	.97	.00
	3	.01	.06
	4	.00	.91
	5	.00	.02

a. Dependent Variable: TSpaths\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00882581807 6730	.01369438134 1338	.01097198188 5825	.00088906620 8827
Std. Predicted Value	-2.414	3.062	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000

Adjusted Predicted Value	.00881688762 4562	.01352014206 3498	.01096190361 2356	.00091596370 2377
Residual	- .00162215589 0800	.00198341067 8804	.00000000000 0000	.00070615252 6750
Std. Residual	-2.244	2.743	.000	.977
Stud. Residual	-2.363	2.788	.006	1.021
Deleted Residual	- .00179962383 1175	.00220840820 1113	.00001007827 3469	.00077973982 3352
Stud. Deleted Residual	-2.432	2.910	.009	1.037
Mahal. Distance	.128	37.144	3.955	5.987
Cook's Distance	.000	.818	.024	.099
Centered Leverage Value	.001	.427	.045	.069

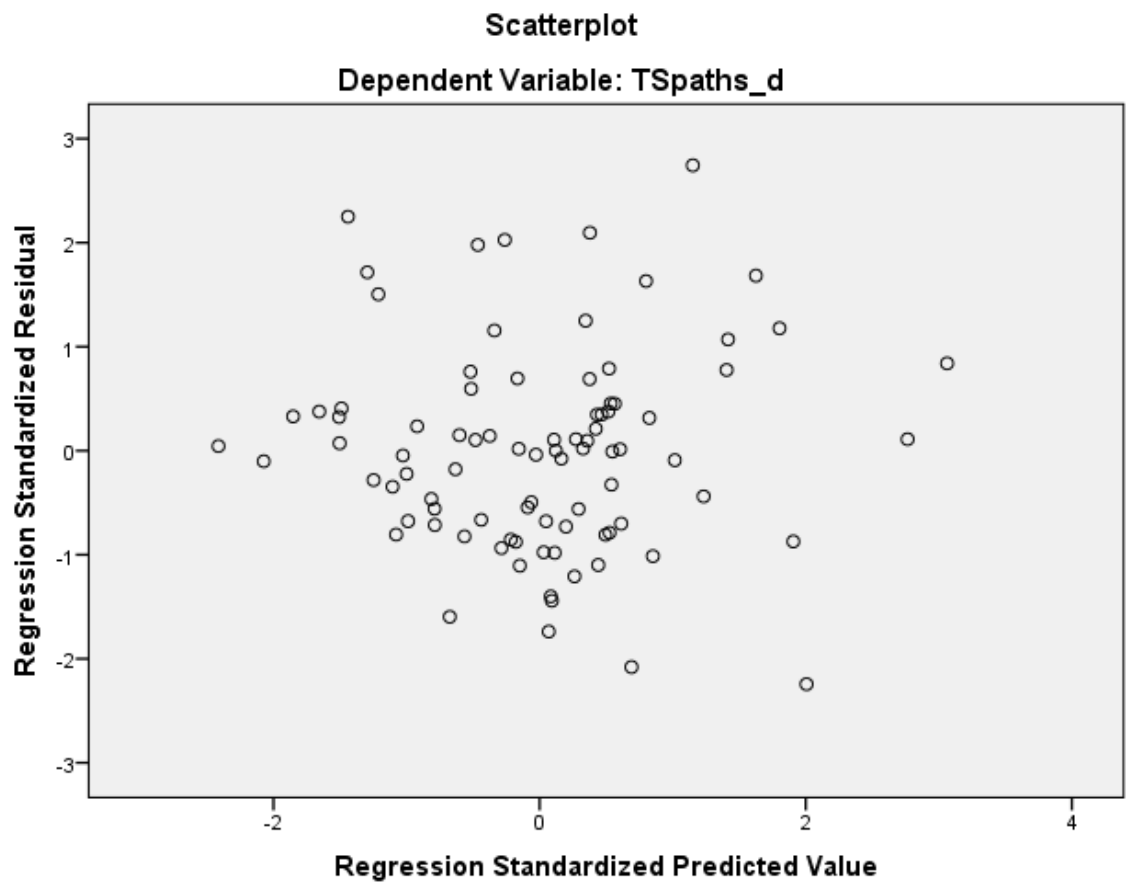
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	88
Std. Predicted Value	88
Standard Error of Predicted Value	88
Adjusted Predicted Value	88
Residual	88
Std. Residual	88
Stud. Residual	88
Deleted Residual	88

Stud. Deleted Residual	88
Mahal. Distance	88
Cook's Distance	88
Centered Leverage Value	88

a. Dependent Variable: TSpaths\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECin

/METHOD=STEPWISE PL\_TpinN PL\_TSpinN S\_con R\_con SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.



## Regression

### Notes

Output Created		31-MAY-2015 10:24:49
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT ECin  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.20
	Elapsed Time		00:00:00.23
	Memory Required	6080 bytes	
	Additional Memory Required for Residual Plots	0 bytes	
Variables Created or Modified	COO_5	Cook's Distance	

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	-------	--	---

a. Dependent Variable: ECin

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.308 <sup>a</sup>	.095	.085	.00509835663 9593

a. Predictors: (Constant), R\_con

b. Dependent Variable: ECin

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	9.356	.003 <sup>b</sup>
	Residual	.002	89	.000		

Total	.003	90			
-------	------	----	--	--	--

a. Dependent Variable: ECin

b. Predictors: (Constant), R\_con

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.058	.015		3.771	.000
R_con	-4.278	1.399	-.308	-3.059	.003

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
R_con	1.000	1.000

a. Dependent Variable: ECin

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	.170 <sup>b</sup>	1.597	.114	.168	.879	1.137
	PL_TSpinN	.150 <sup>b</sup>	1.326	.188	.140	.783	1.277
	S_con	-.111 <sup>b</sup>	-.933	.353	-.099	.726	1.378
	SMSP_d	.129 <sup>b</sup>	1.267	.209	.134	.981	1.019

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpinN	.879	
	PL_TSpinN	.783	
	S_con	.726	
	SMSP_d	.981	

a. Dependent Variable: ECin

b. Predictors in the Model: (Constant), R\_con

**Collinearity Diagnostics<sup>a</sup>**

Model    Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_con

1	1	1.999	1.000	.00	.00
	2	.001	57.536	1.00	1.00

a. Dependent Variable: ECin

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00568671617 6569	.01426511444 1514	.01098901098 9011	.00164379713 2151
Std. Predicted Value	-3.226	1.993	.000	1.000
Standard Error of Predicted Value	.001	.002	.001	.000
Adjusted Predicted Value	.00622224248 9457	.01448527630 4185	.01100273804 5704	.00163467925 8744
Residual	- .00884193088 8593	.01202812325 2094	.00000000000 0000	.00506995331 7536
Std. Residual	-1.734	2.359	.000	.994
Stud. Residual	-1.749	2.374	-.001	1.005
Deleted Residual	- .00900834705 6806	.01218376774 3409	- .00001372705 6693	.00517544694 1051
Stud. Deleted Residual	-1.770	2.440	.000	1.011
Mahal. Distance	.001	10.405	.989	1.441
Cook's Distance	.000	.076	.010	.013

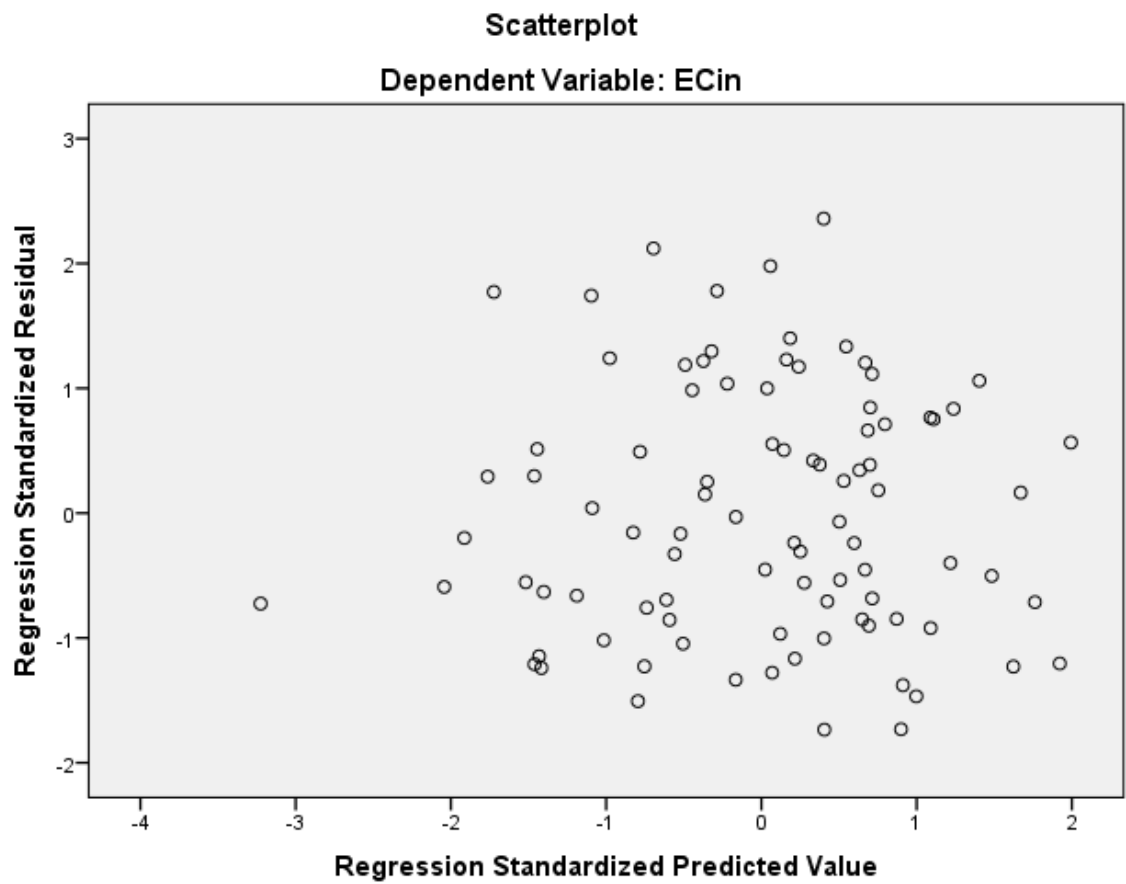
Centered Leverage Value	.000	.116	.011	.016
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# Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECin

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCinN

/METHOD=STEPWISE PL\_TpinN PL\_TSpinN S\_con R\_con SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.



## Regression

### Notes

Output Created		31-MAY-2015 10:25:12
Comments		
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_EVCinN
		/METHOD=STEPWISE PL_TpinN
		PL_TSpinN S_con R_con SMSP_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03
	Memory Required	6112 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or Modified	COO_6	
		Cook's Distance

Warnings

No variables were entered into the equation.

REGRESSION

```

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCin_TpinN

/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:25:19
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCin_TpinN  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.20
	Memory Required	6160 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	PL_TpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	PL_TSpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCin\_TpinN

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.411 <sup>a</sup>	.169	.160	.00599782905 4797
2	.459 <sup>b</sup>	.211	.193	.00587852271 0260
3	.509 <sup>c</sup>	.259	.234	.00572625955 2177

a. Predictors: (Constant), PL\_TpinN

b. Predictors: (Constant), PL\_TpinN, PL\_TSpinN

c. Predictors: (Constant), PL\_TpinN, PL\_TSpinN, SMSP\_d

d. Dependent Variable: EVCin\_TpinN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	18.083	.000 <sup>b</sup>
	Residual	.003	89	.000		
	Total	.004	90			
2	Regression	.001	2	.000	11.737	.000 <sup>c</sup>
	Residual	.003	88	.000		
	Total	.004	90			

3	Regression	.001	3	.000	10.160	.000 <sup>d</sup>
	Residual	.003	87	.000		
	Total	.004	90			

a. Dependent Variable: EVCin\_TpinN

b. Predictors: (Constant), PL\_TpinN

c. Predictors: (Constant), PL\_TpinN, PL\_TSpinN

d. Predictors: (Constant), PL\_TpinN, PL\_TSpinN, SMSP\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.023	.003		7.901	.000
	PL_TpinN	-1.108	.261	-.411	-4.252	.000
2	(Constant)	.026	.003		8.260	.000
	PL_TpinN	-.921	.270	-.342	-3.415	.001
	PL_TSpinN	-.428	.198	-.216	-2.156	.034
3	(Constant)	.027	.003		8.675	.000
	PL_TpinN	-.872	.264	-.323	-3.306	.001
	PL_TSpinN	-.608	.207	-.306	-2.932	.004
	SMSP_d	.064	.027	.237	2.396	.019

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpinN	1.000	1.000
2	(Constant)		
	PL_TpinN	.897	1.115
	PL_TSpinN	.897	1.115
3	(Constant)		
	PL_TpinN	.891	1.122
	PL_TSpinN	.779	1.284
	SMSP_d	.867	1.154

a. Dependent Variable: EVCin\_TpinN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpinN	-.216 <sup>b</sup>	-2.156	.034	-.224	.897	1.115
	S_con	-.017 <sup>b</sup>	-.171	.865	-.018	.931	1.074
	R_con	.180 <sup>b</sup>	1.767	.081	.185	.879	1.137



	SMSP_d	.132 <sup>b</sup>	1.373	.173	.145	.998	1.002
2	S_con	-.057 <sup>c</sup>	-.574	.568	-.061	.900	1.111
	R_con	.111 <sup>c</sup>	1.005	.318	.107	.739	1.353
	SMSP_d	.237 <sup>c</sup>	2.396	.019	.249	.867	1.154
3	S_con	-.049 <sup>d</sup>	-.500	.618	-.054	.899	1.112
	R_con	.106 <sup>d</sup>	.990	.325	.106	.739	1.353

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpinN	.897
	S_con	.931
	R_con	.879
	SMSP_d	.998
2	S_con	.861
	R_con	.739
	SMSP_d	.779
3	S_con	.760
	R_con	.666

a. Dependent Variable: EVCin\_TpinN

b. Predictors in the Model: (Constant), PL\_TpinN

c. Predictors in the Model: (Constant), PL\_TpinN, PL\_TSpinN

d. Predictors in the Model: (Constant), PL\_TpinN, PL\_TSpinN, SMSP\_d

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpinN	PL_TSpinN
1	1	1.977	1.000	.01	.01	
	2	.023	9.220	.99	.99	
2	1	2.927	1.000	.00	.00	.01
	2	.050	7.674	.10	.16	.98
	3	.023	11.240	.89	.83	.01
3	1	3.194	1.000	.00	.00	.01
	2	.739	2.079	.00	.00	.00
	3	.044	8.501	.10	.18	.98
	4	.023	11.746	.89	.81	.01

Collinearity Diagnostics<sup>a</sup>

Model                      Dimension		Variance Proportions
		SMSP_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.02
	2	.86
	3	.12
	4	.00

a. Dependent Variable: EVCin\_TpinN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00212107109 8372	.01909662783 1459	.01098901098 9011	.00333243550 1370
Std. Predicted Value	-2.661	2.433	.000	1.000
Standard Error of Predicted Value	.001	.005	.001	.001
Adjusted Predicted Value	.00043357329 5595	.02071411348 8793	.01089962277 7545	.00354455396 6684
Residual	- .01360128913 0747	.01117737311 8699	.00000000000 0000	.00563001304 1157
Std. Residual	-2.375	1.952	.000	.983
Stud. Residual	-2.403	2.245	.006	1.013
Deleted Residual	- .01391813065 8567	.01478855591 2673	.00008938821 1466	.00602795847 8392

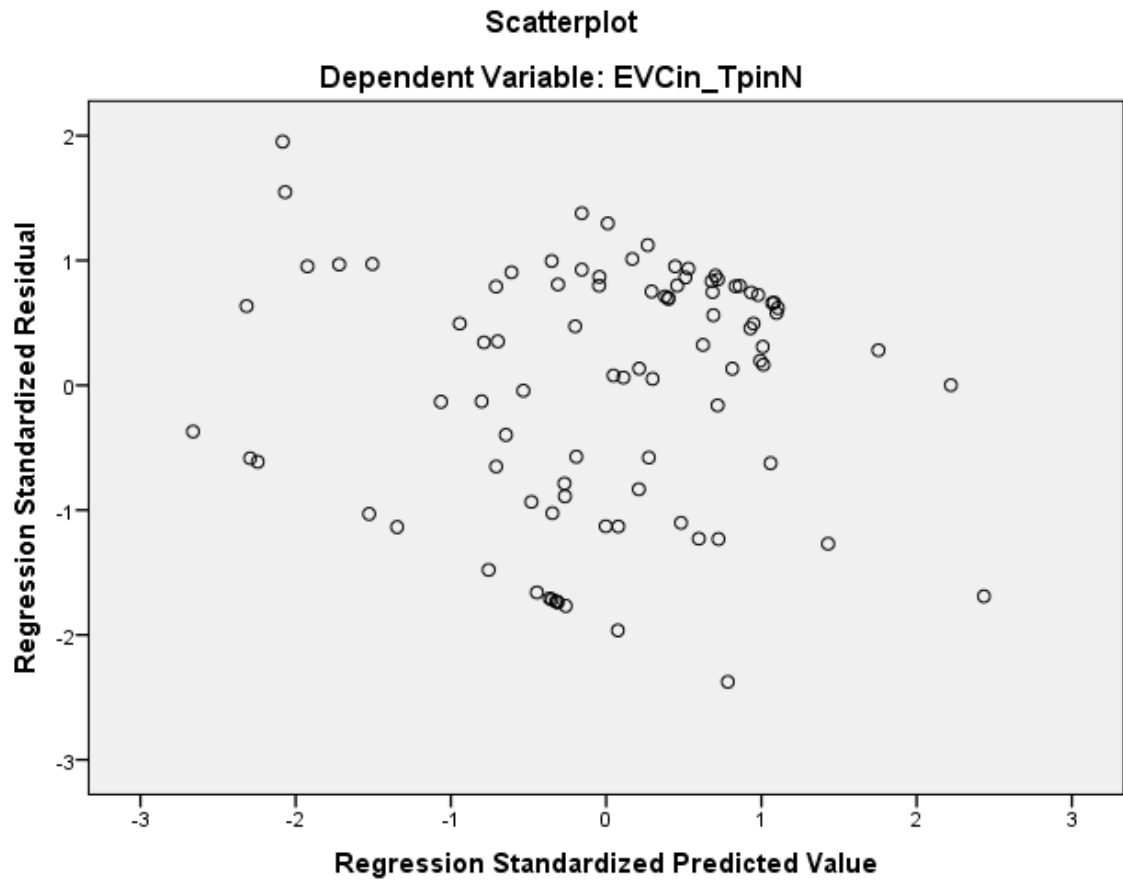
Stud. Deleted Residual	-2.472	2.300	.003	1.020
Mahal. Distance	.073	57.037	2.967	7.065
Cook's Distance	.000	.560	.021	.075
Centered Leverage Value	.001	.634	.033	.078

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCin\_TpinN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

```

/DEPENDENT EVCin_TSpinN

/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

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	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.
		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCin_TSpinN  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.06
	Memory Required	6192 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_8	Cook's Distance

### Warnings

No variables were entered into the equation.

## REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECd

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpdN\_d  
AvgPL\_d AvgGL\_d PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 07:01:03
Comments	



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	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File		91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on cases with no missing values for any variable used.	
Syntax		REGRESSION	
		/MISSING LISTWISE	
		/STATISTICS COEFF OUTS R ANOVA COLLIN TOL	
		/CRITERIA=PIN(.05) POUT(.10)	
		/NOORIGIN	
Resources		/DEPENDENT ECd	
		/METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d PL_TpdN PL_TSpdN S_d R_d SMSP_d	
		/SCATTERPLOT=(*ZRESID ,*ZPRED)	
		/SAVE COOK.	
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	Elapsed Time		00:00:00.19

	Memory Required	17200 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_1	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECd

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.317 <sup>a</sup>	.100	.090	.00398032730 2660

a. Predictors: (Constant), AvgPL\_d

b. Dependent Variable: ECd

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	9.938	.002 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			

a. Dependent Variable: ECd

b. Predictors: (Constant), AvgPL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.014	.001		13.019	.000
	AvgPL_d	-.288	.091	-.317	-3.152	.002

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_d	1.000	1.000

a. Dependent Variable: ECd

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	-.150 <sup>b</sup>	-1.393	.167	-.147	.857	1.166
	Edges_d	-.169 <sup>b</sup>	-1.525	.131	-.160	.808	1.237
	Reciprocity	-.043 <sup>b</sup>	-.402	.689	-.043	.876	1.141
	Den_d	.146 <sup>b</sup>	1.318	.191	.139	.811	1.233
	CC_d	.044 <sup>b</sup>	.432	.667	.046	1.000	1.000
	GD_d	-.012 <sup>b</sup>	-.034	.973	-.004	.079	12.624
	Tpaths_d	.011 <sup>b</sup>	.057	.955	.006	.283	3.537
	TSpaths_d	-.071 <sup>b</sup>	-.565	.573	-.060	.650	1.537
	AvgGL_d	-.038 <sup>b</sup>	-.274	.785	-.029	.530	1.887
	PL_TpdN	-.012 <sup>b</sup>	-.121	.904	-.013	.966	1.035
	PL_TSpdN	.075 <sup>b</sup>	.742	.460	.079	.988	1.012

S_d	.016 <sup>b</sup>	.162	.872	.017	1.000	1.000
R_d	-.134 <sup>b</sup>	-1.258	.212	-.133	.888	1.126
SMSP_d	.013 <sup>b</sup>	.124	.902	.013	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.857
	Edges_d	.808
	Reciprocity	.876
	Den_d	.811
	CC_d	1.000
	GD_d	.079
	Tpaths_d	.283
	TSpaths_d	.650
	AvgGL_d	.530
	PL_TpdN	.966
	PL_TSpdN	.988
	S_d	1.000
	R_d	.888
	SMSP_d	.995

a. Dependent Variable: ECd

b. Predictors in the Model: (Constant), AvgPL\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	AvgPL_d
1	1	1.923	1.000	.04	.04
	2	.077	5.012	.96	.96

a. Dependent Variable: ECd

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00594502687 4542	.01305994391 4413	.01098901098 9011	.00132263518 6720
Std. Predicted Value	-3.814	1.566	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00540280761 1972	.01315527316 1829	.01098329469 1284	.00134937884 2731
Residual	- .00787286367 2674	.00697956234 2167	.00000000000 0000	.00395815260 4759
Std. Residual	-1.978	1.754	.000	.994

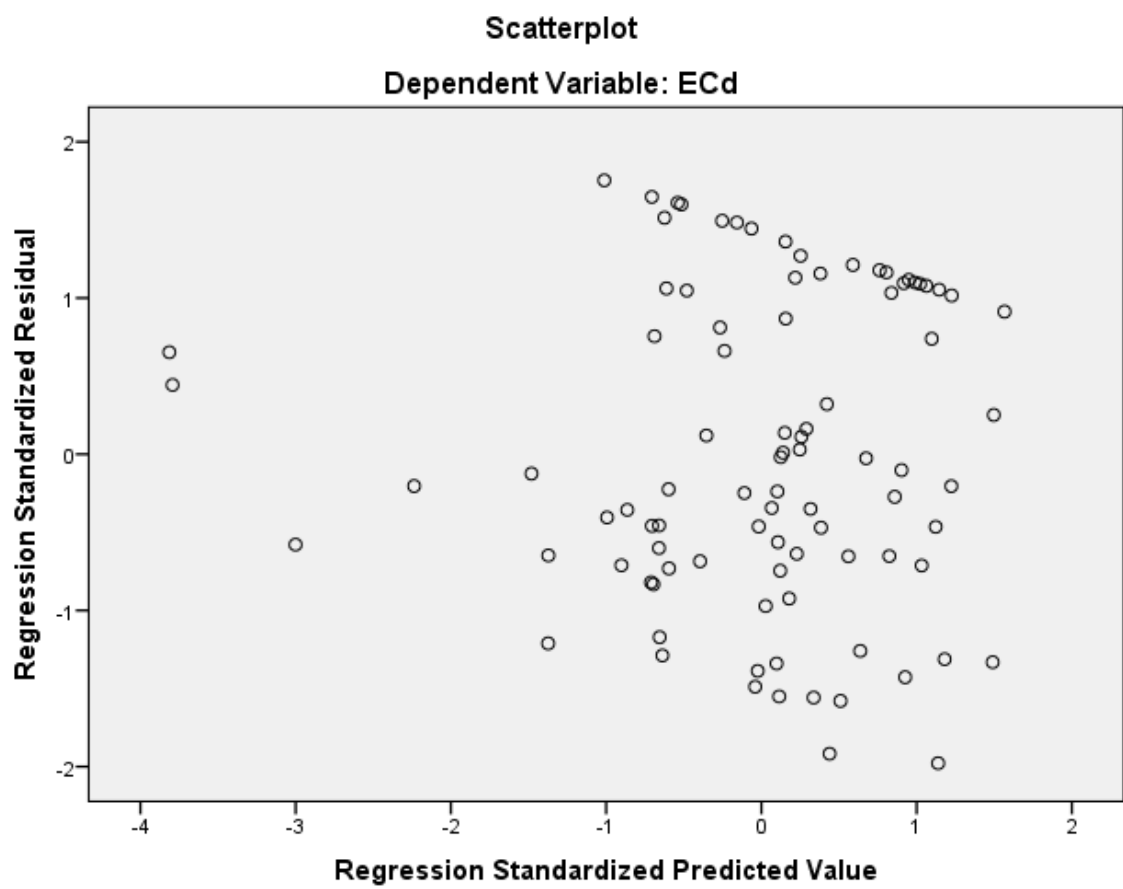
Stud. Residual	-2.004	1.773	.001	1.004
Deleted Residual	-	.00713928695	.00000571629	.00403405975
	.00807791762	7681	7727	6012
	0540			
Stud. Deleted Residual	-2.039	1.795	.001	1.009
Mahal. Distance	.000	14.543	.989	2.340
Cook's Distance	.000	.054	.010	.010
Centered Leverage Value	.000	.162	.011	.026

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECd

## Charts



REGRESSION

/MISSING LISTWISE



/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCdN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpats\_d  
AvgPL\_d AvgGL\_d PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 07:01:25	
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_EVCdN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.24
	Memory Required	17232 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Created or Modified	COO_2	Cook's Distance
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**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	PL_TpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	CC_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

4	Den_d	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: PL\_EVCdN

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.389 <sup>a</sup>	.151	.142	.00377245587 9210
2	.485 <sup>b</sup>	.235	.218	.00360246601 1139
3	.543 <sup>c</sup>	.295	.271	.00347728845 4469
4	.578 <sup>d</sup>	.334	.303	.00340061878 9405

a. Predictors: (Constant), PL\_TpdN

b. Predictors: (Constant), PL\_TpdN, Tpaths\_d

c. Predictors: (Constant), PL\_TpdN, Tpaths\_d, CC\_d

d. Predictors: (Constant), PL\_TpdN, Tpaths\_d, CC\_d, Den\_d

e. Dependent Variable: PL\_EVCdN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	15.889	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	13.511	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			
3	Regression	.000	3	.000	12.150	.000 <sup>d</sup>
	Residual	.001	87	.000		
	Total	.001	90			
4	Regression	.000	4	.000	10.770	.000 <sup>e</sup>
	Residual	.001	86	.000		
	Total	.001	90			

a. Dependent Variable: PL\_EVCdN

b. Predictors: (Constant), PL\_TpdN

c. Predictors: (Constant), PL\_TpdN, Tpaths\_d

d. Predictors: (Constant), PL\_TpdN, Tpaths\_d, CC\_d

e. Predictors: (Constant), PL\_TpdN, Tpaths\_d, CC\_d, Den\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.001		4.515	.000
	PL_TpdN	.457	.115	.389	3.986	.000
2	(Constant)	.002	.002		.804	.423
	PL_TpdN	.545	.113	.464	4.815	.000
	Tpaths_d	.316	.102	.298	3.098	.003
3	(Constant)	.001	.002		.359	.720
	PL_TpdN	.544	.109	.463	4.986	.000
	Tpaths_d	.345	.099	.326	3.485	.001
	CC_d	.050	.018	.247	2.729	.008
4	(Constant)	-.005	.003		-1.526	.131
	PL_TpdN	.527	.107	.448	4.917	.000
	Tpaths_d	.456	.109	.430	4.188	.000
	CC_d	.045	.018	.226	2.535	.013
	Den_d	.383	.172	.227	2.229	.028

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpdN	1.000	1.000
2	(Constant)		
	PL_TpdN	.938	1.066
	Tpaths_d	.938	1.066
3	(Constant)		
	PL_TpdN	.938	1.066
	Tpaths_d	.927	1.079
	CC_d	.988	1.013
4	(Constant)		
	PL_TpdN	.933	1.072
	Tpaths_d	.733	1.364
	CC_d	.976	1.024
	Den_d	.748	1.337

a. Dependent Variable: PL\_EVCdN

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
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					Correlation	Tolerance	VIF	Minimum Tolerance
1	Nodes	-.056 <sup>b</sup>	-.565	.574	-.060	.967	1.035	.967
	Edges_d	-.043 <sup>b</sup>	-.431	.667	-.046	.975	1.026	.975
	Reciprocity	.257 <sup>b</sup>	2.714	.008	.278	.991	1.009	.991
	Den_d	.063 <sup>b</sup>	.630	.531	.067	.966	1.035	.966
	CC_d	.213 <sup>b</sup>	2.230	.028	.231	.999	1.001	.999
	GD_d	.230 <sup>b</sup>	2.403	.018	.248	.987	1.013	.987
	Tpaths_d	.298 <sup>b</sup>	3.098	.003	.314	.938	1.066	.938
	TSpaths_d	.194 <sup>b</sup>	1.978	.051	.206	.964	1.037	.964
	AvgPL_d	.282 <sup>b</sup>	2.959	.004	.301	.966	1.035	.966
	AvgGL_d	.224 <sup>b</sup>	2.346	.021	.243	.996	1.004	.996
	PL_TSpdN	-.145 <sup>b</sup>	-1.480	.142	-.156	.977	1.023	.977
	S_d	.037 <sup>b</sup>	.368	.714	.039	.963	1.038	.963
	R_d	.094 <sup>b</sup>	.945	.347	.100	.963	1.038	.963
	SMSP_d	.158 <sup>b</sup>	1.629	.107	.171	1.000	1.000	1.000
2	Nodes	-.228 <sup>c</sup>	-2.210	.030	-.231	.782	1.278	.759
	Edges_d	-.245 <sup>c</sup>	-2.314	.023	-.241	.741	1.349	.713
	Reciprocity	.129 <sup>c</sup>	1.102	.274	.117	.631	1.585	.597
	Den_d	.255 <sup>c</sup>	2.441	.017	.253	.757	1.321	.735
	CC_d	.247 <sup>c</sup>	2.729	.008	.281	.988	1.013	.927
	GD_d	.019 <sup>c</sup>	.130	.897	.014	.411	2.436	.390
	TSpaths_d	-.055 <sup>c</sup>	-.385	.701	-.041	.434	2.305	.422



	AvgPL_d	.118 <sup>c</sup>	.672	.503	.072	.282	3.548	.273
	AvgGL_d	.080 <sup>c</sup>	.682	.497	.073	.642	1.559	.604
	PL_TSpdN	-.132 <sup>c</sup>	-1.408	.163	-.149	.975	1.026	.920
	S_d	.088 <sup>c</sup>	.910	.365	.097	.937	1.068	.912
	R_d	.048 <sup>c</sup>	.499	.619	.053	.939	1.065	.890
	SMSP_d	.206 <sup>c</sup>	2.231	.028	.233	.977	1.024	.916
3	Nodes	-.202 <sup>d</sup>	-2.013	.047	-.212	.775	1.291	.757
	Edges_d	-.224 <sup>d</sup>	-2.179	.032	-.229	.737	1.357	.711
	Reciprocity	.106 <sup>d</sup>	.928	.356	.100	.627	1.595	.587
	Den_d	.227 <sup>d</sup>	2.229	.028	.234	.748	1.337	.733
	GD_d	-.001 <sup>d</sup>	-.005	.996	-.001	.409	2.442	.385
	TSpaths_d	.072 <sup>d</sup>	.499	.619	.054	.389	2.569	.389
	AvgPL_d	.053 <sup>d</sup>	.305	.761	.033	.276	3.624	.265
	AvgGL_d	.090 <sup>d</sup>	.796	.428	.086	.641	1.560	.601
	PL_TSpdN	-.170 <sup>d</sup>	-1.877	.064	-.198	.956	1.046	.920
	S_d	.082 <sup>d</sup>	.882	.380	.095	.936	1.068	.902
	R_d	.013 <sup>d</sup>	.138	.890	.015	.921	1.086	.889
	SMSP_d	-.276 <sup>d</sup>	-.986	.327	-.106	.103	9.694	.103
4	Nodes	-.045 <sup>e</sup>	-.232	.817	-.025	.211	4.738	.204
	Edges_d	-.110 <sup>e</sup>	-.602	.549	-.065	.234	4.279	.234
	Reciprocity	.032 <sup>e</sup>	.276	.783	.030	.568	1.761	.422
	GD_d	.002 <sup>e</sup>	.012	.991	.001	.409	2.443	.349
	TSpaths_d	.126 <sup>e</sup>	.878	.383	.095	.379	2.636	.379

AvgPL_d	.077 <sup>e</sup>	.457	.649	.050	.275	3.640	.252
AvgGL_d	.061 <sup>e</sup>	.552	.582	.060	.632	1.583	.486
PL_TSpdN	-.150 <sup>e</sup>	-1.671	.098	-.178	.944	1.059	.729
S_d	.002 <sup>e</sup>	.016	.988	.002	.787	1.270	.629
R_d	.000 <sup>e</sup>	.002	.998	.000	.917	1.091	.709
SMSP_d	-.091 <sup>e</sup>	-.313	.755	-.034	.093	10.789	.093

a. Dependent Variable: PL\_EVCdN

b. Predictors in the Model: (Constant), PL\_TpdN

c. Predictors in the Model: (Constant), PL\_TpdN, Tpaths\_d

d. Predictors in the Model: (Constant), PL\_TpdN, Tpaths\_d, CC\_d

e. Predictors in the Model: (Constant), PL\_TpdN, Tpaths\_d, CC\_d, Den\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpdN	Tpaths_d
1	1	1.954	1.000	.02	.02	
	2	.046	6.528	.98	.98	
2	1	2.850	1.000	.00	.01	.01
	2	.124	4.799	.00	.32	.44
	3	.026	10.521	.99	.68	.55
3	1	3.141	1.000	.00	.01	.01

	2	.712	2.101	.00	.00	.01
	3	.122	5.068	.00	.33	.42
	4	.025	11.145	.99	.66	.56
4	1	4.075	1.000	.00	.00	.00
	2	.721	2.377	.00	.00	.00
	3	.136	5.474	.00	.14	.38
	4	.057	8.419	.01	.73	.03
	5	.010	19.961	.99	.11	.58

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions	
		CC_d	Den_d
1	1		
	2		
2	1		
	2		
	3		
3	1	.03	
	2	.94	
	3	.01	
	4	.02	
4	1	.02	.00
	2	.95	.00

3	.02	.03
4	.01	.25
5	.00	.72

a. Dependent Variable: PL\_EVCdN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00692505855 1133	.02115874737 5011	.01098901098 9011	.00235276467 5904
Std. Predicted Value	-1.727	4.322	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	.00661705154 9256	.01967717148 3636	.01098271562 4577	.00228678131 4220
Residual	- .00501470360 9049	.01629409193 9926	.00000000000 0000	.00332419062 9935
Std. Residual	-1.475	4.792	.000	.978
Stud. Residual	-1.539	5.138	.001	1.015
Deleted Residual	- .00546096079 0515	.01873338408 7682	.00000629536 4434	.00359203622 7543
Stud. Deleted Residual	-1.551	6.135	.020	1.110
Mahal. Distance	.291	54.209	3.956	6.960

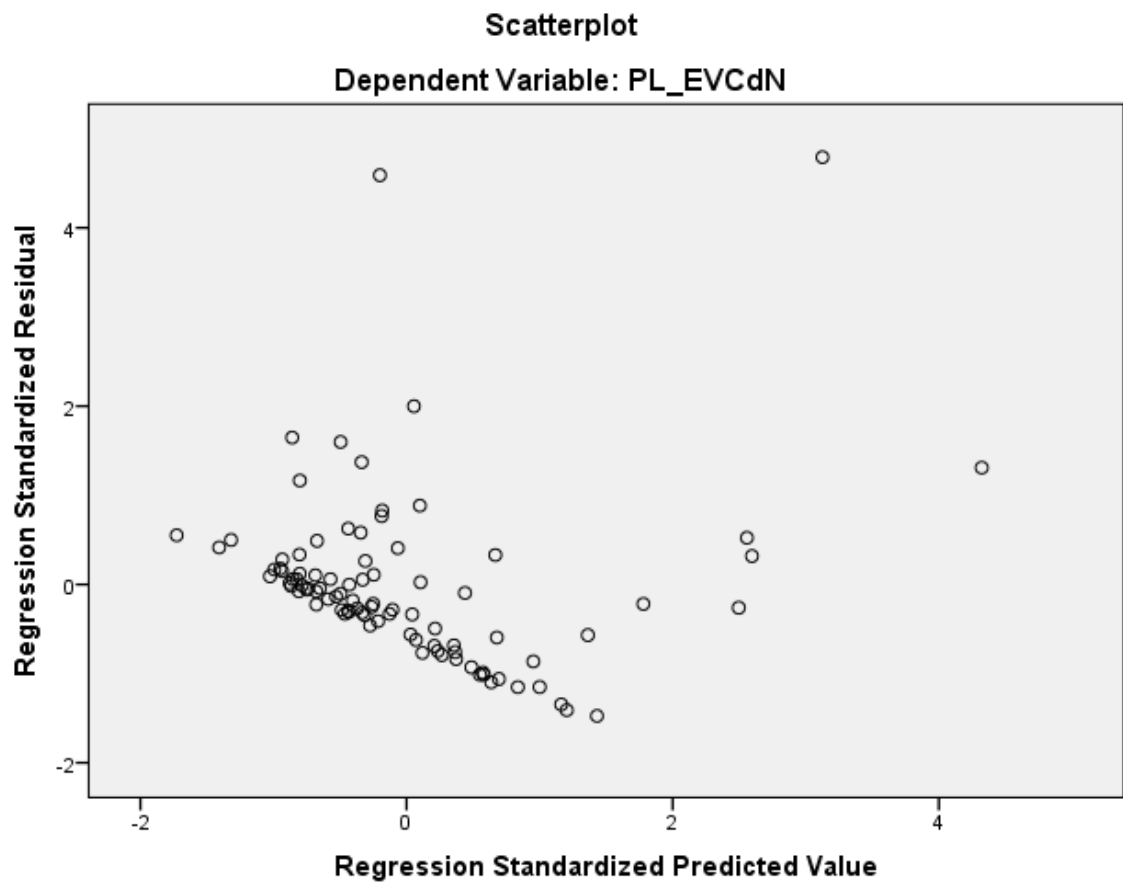
Cook's Distance	.000	.790	.017	.084
Centered Leverage Value	.003	.602	.044	.077

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCdN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCd\_TpdN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpdN\_d  
AvgPL\_d AvgGL\_d PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 07:01:49
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
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	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCd_TpdN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpdN AvgPL_d AvgGL_d PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.22
	Memory Required	17280 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_3	Cook's Distance

Variables Entered/Removed<sup>a</sup>



Model	Variables Entered	Variables Removed	Method
1	Reciprocity		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCd\_TpdN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.265 <sup>a</sup>	.070	.060	.01006142436 8278

a. Predictors: (Constant), Reciprocity

b. Dependent Variable: EVCd\_TpdN

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.001	1	.001	6.730	.011 <sup>b</sup>
	Residual	.009	89	.000		
	Total	.010	90			

a. Dependent Variable: EVCd\_TpdN

b. Predictors: (Constant), Reciprocity

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.002		2.748	.007
	Reciprocity	.453	.174	.265	2.594	.011

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000

a. Dependent Variable: EVCd\_TpdN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	.064 <sup>b</sup>	.626	.533	.067	.998	1.002
	Edges_d	.082 <sup>b</sup>	.802	.425	.085	.996	1.004
	Den_d	.042 <sup>b</sup>	.405	.686	.043	.994	1.006
	CC_d	.161 <sup>b</sup>	1.586	.116	.167	1.000	1.000
	GD_d	-.028 <sup>b</sup>	-.261	.795	-.028	.942	1.061
	Tpaths_d	.071 <sup>b</sup>	.553	.582	.059	.634	1.577
	TSpads_d	.064 <sup>b</sup>	.565	.574	.060	.828	1.208
	AvgPL_d	-.012 <sup>b</sup>	-.105	.916	-.011	.876	1.141
	AvgGL_d	.005 <sup>b</sup>	.045	.964	.005	.907	1.103
	PL_TpdN	.100 <sup>b</sup>	.971	.334	.103	.991	1.009
	PL_TSpdN	-.096 <sup>b</sup>	-.925	.358	-.098	.964	1.037
	S_d	-.061 <sup>b</sup>	-.593	.554	-.063	1.000	1.000
	R_d	.082 <sup>b</sup>	.798	.427	.085	.986	1.014
	SMSP_d	.127 <sup>b</sup>	1.248	.216	.132	1.000	1.000

**Excluded Variables<sup>a</sup>**

Model	Collinearity Statistics
	Minimum Tolerance

1	Nodes	.998
	Edges_d	.996
	Den_d	.994
	CC_d	1.000
	GD_d	.942
	Tpaths_d	.634
	TSpaths_d	.828
	AvgPL_d	.876
	AvgGL_d	.907
	PL_TpdN	.991
	PL_TSpdN	.964
	S_d	1.000
	R_d	.986
	SMSP_d	1.000

a. Dependent Variable: EVCd\_TpdN

b. Predictors in the Model: (Constant), Reciprocity

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Reciprocity

1	1	1.876	1.000	.06	.06
	2	.124	3.893	.94	.94

a. Dependent Variable: EVCd\_TpdN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00802708417 1772	.02705212123 6920	.01098901098 9011	.00275143650 9947
Std. Predicted Value	-1.077	5.838	.000	1.000
Standard Error of Predicted Value	.001	.006	.001	.001
Adjusted Predicted Value	.00770581699 9078	.03178727254 2715	.01101376626 1315	.00300864443 9290
Residual	- .01485836599 0222	.02258790098 1307	.00000000000 0000	.01000537142 8695
Std. Residual	-1.477	2.245	.000	.994
Stud. Residual	-1.502	2.259	-.001	1.005
Deleted Residual	- .01536484248 9362	.02286762557 9238	- .00002475527 2304	.01022501371 7909
Stud. Deleted Residual	-1.513	2.313	.001	1.010
Mahal. Distance	.000	34.083	.989	3.890
Cook's Distance	.000	.284	.012	.031

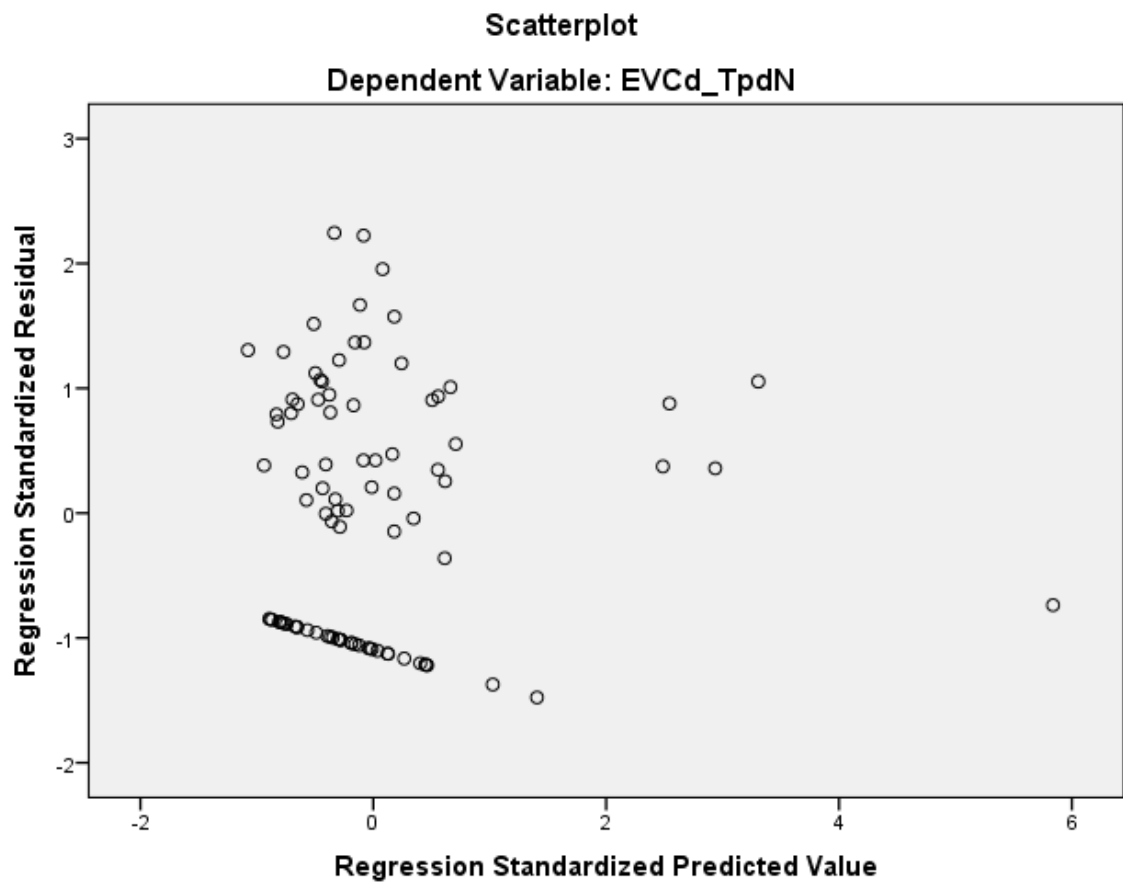
Centered Leverage Value	.000	.379	.011	.043
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#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCd\_TpdN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCd\_TSpdN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpdN\_d  
AvgPL\_d AvgGL\_d PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.



Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCd_TSpdN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpdN AvgPL_d AvgGL_d PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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Variables Created or Modified	COO_4	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	PL_TSpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCd\_TSpdN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.267 <sup>a</sup>	.071	.061	.01643341786 4161

a. Predictors: (Constant), PL\_TSpdN

b. Dependent Variable: EVCd\_TSpdN

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.002	1	.002	6.845	.010 <sup>b</sup>
	Residual	.024	89	.000		
	Total	.026	90			

a. Dependent Variable: EVCd\_TSpdN

b. Predictors: (Constant), PL\_TSpdN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.029	.007		4.057	.000
	PL_TSpdN	-1.677	.641	-.267	-2.616	.010

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TSpdN	1.000	1.000

a. Dependent Variable: EVCd\_TSpdN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	.044 <sup>b</sup>	.428	.670	.046	1.000	1.000
	Edges_d	.055 <sup>b</sup>	.532	.596	.057	1.000	1.000
	Reciprocity	-.009 <sup>b</sup>	-.089	.929	-.009	.964	1.037
	Den_d	.024 <sup>b</sup>	.233	.817	.025	.999	1.001
	CC_d	-.123 <sup>b</sup>	-1.193	.236	-.126	.979	1.022
	GD_d	-.022 <sup>b</sup>	-.215	.830	-.023	.968	1.033
	Tpaths_d	.090 <sup>b</sup>	.881	.381	.093	.993	1.007
	TSpaths_d	.154 <sup>b</sup>	1.380	.171	.146	.835	1.198
	AvgPL_d	-.032 <sup>b</sup>	-.310	.758	-.033	.988	1.012
	AvgGL_d	.011 <sup>b</sup>	.108	.914	.011	.990	1.010
	PL_TpdN	.140 <sup>b</sup>	1.364	.176	.144	.977	1.023
	S_d	-.065 <sup>b</sup>	-.630	.530	-.067	.992	1.008
	R_d	-.032 <sup>b</sup>	-.302	.764	-.032	.958	1.044
	SMSP_d	-.145 <sup>b</sup>	-1.413	.161	-.149	.978	1.023

**Excluded Variables<sup>a</sup>**

Model	Collinearity Statistics
	Minimum Tolerance

1	Nodes	1.000
	Edges_d	1.000
	Reciprocity	.964
	Den_d	.999
	CC_d	.979
	GD_d	.968
	Tpaths_d	.993
	TSpaths_d	.835
	AvgPL_d	.988
	AvgGL_d	.990
	PL_TpdN	.977
	S_d	.992
	R_d	.958
	SMSP_d	.978

a. Dependent Variable: EVCd\_TSpdN

b. Predictors in the Model: (Constant), PL\_TSpdN

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	PL_TSpdN

1	1	1.971	1.000	.01	.01
	2	.029	8.300	.99	.99

a. Dependent Variable: EVCd\_TSpdN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00743280211 4636	.01597926951 9448	.01098901098 9011	.00453217459 9353
Std. Predicted Value	-4.065	1.101	.000	1.000
Standard Error of Predicted Value	.002	.007	.002	.001
Adjusted Predicted Value	- .00922827422 6189	.01637991704 0467	.01095185735 7003	.00464889038 6065
Residual	- .01597926951 9448	.04524136334 6577	.00000000000 0000	.01634186607 7360
Std. Residual	-.972	2.753	.000	.994
Stud. Residual	-.984	2.776	.001	1.003
Deleted Residual	- .01637991704 0467	.04600794985 8904	.00003715363 2008	.01663113342 5545
Stud. Deleted Residual	-.984	2.889	.007	1.012
Mahal. Distance	.000	16.522	.989	2.410

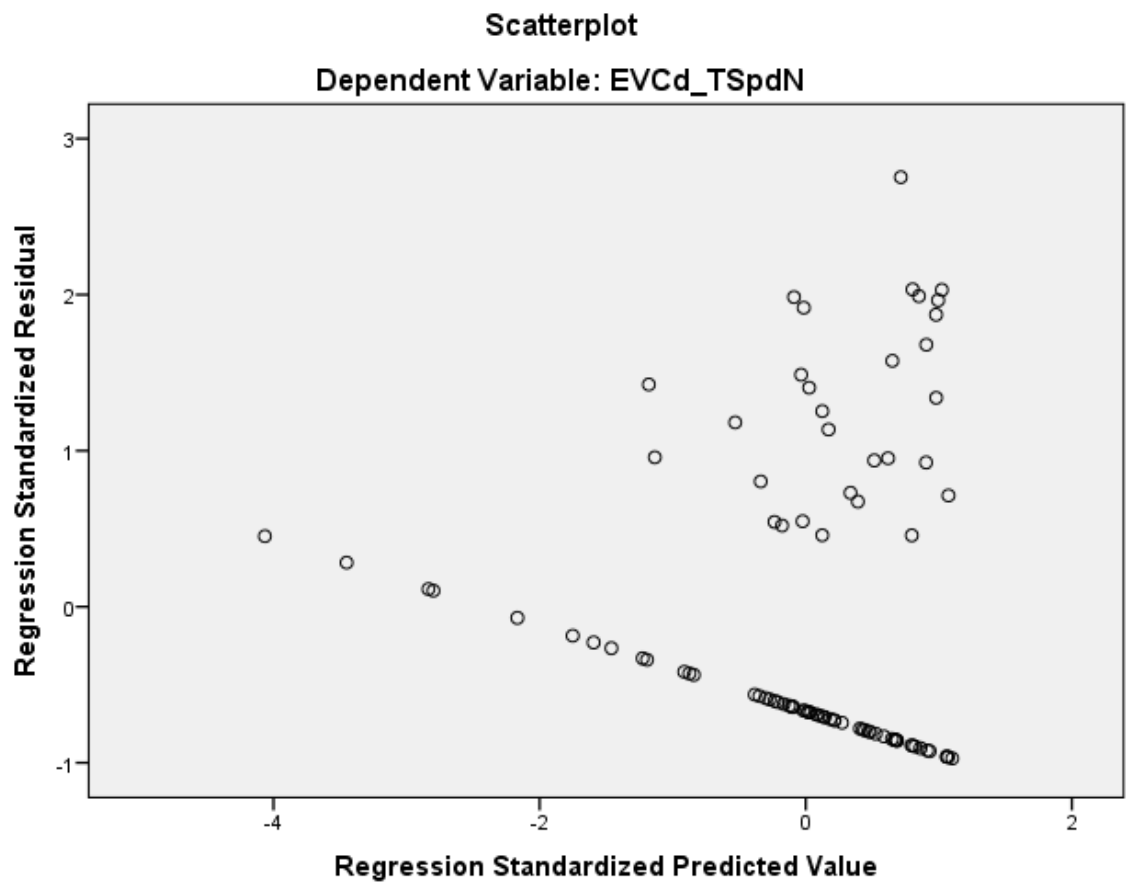
Cook's Distance	.000	.065	.009	.012
Centered Leverage Value	.000	.184	.011	.027

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCd\_TSpdN

## Charts



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/SHEET=name 'Sheet1'

/CELLRANGE=full

/READNAMES=on

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EXECUTE.



DATASET NAME DataSet1 WINDOW=FRONT.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECd

/METHOD=STEPWISE GD\_d Tpaths\_d TSpaths\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
		Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION	
		/MISSING LISTWISE	
		/STATISTICS COEFF OUTS R ANOVA COLLIN TOL	
		/CRITERIA=PIN(.05) POUT(.10)	
		/NOORIGIN	
Resources		/DEPENDENT ECd	
		/METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d	
		/SCATTERPLOT=(*ZRESID ,*ZPRED)	
		/SAVE COOK.	
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	Memory Required	5920 bytes	
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Variables Created or Modified	COO_1	Cook's Distance
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[DataSet1]

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECd

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.317 <sup>a</sup>	.100	.090	.00398032730 2660
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a. Predictors: (Constant), AvgPL\_d

b. Dependent Variable: ECd

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	9.938	.002 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			

a. Dependent Variable: ECd

b. Predictors: (Constant), AvgPL\_d

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.014	.001		13.019	.000
	AvgPL_d	-.288	.091	-.317	-3.152	.002

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1		
(Constant)		
AvgPL_d	1.000	1.000

a. Dependent Variable: ECd

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.012 <sup>b</sup>	-.034	.973	-.004	.079	12.624
	Tpaths_d	.011 <sup>b</sup>	.057	.955	.006	.283	3.537
	TSpaths_d	-.071 <sup>b</sup>	-.565	.573	-.060	.650	1.537
	AvgGL_d	-.038 <sup>b</sup>	-.274	.785	-.029	.530	1.887

**Excluded Variables<sup>a</sup>**

Model	Collinearity Statistics	
	Minimum Tolerance	
1	GD_d	.079
	Tpaths_d	.283

TSpaths_d	.650
AvgGL_d	.530

a. Dependent Variable: ECd

b. Predictors in the Model: (Constant), AvgPL\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	AvgPL_d
1	1	1.923	1.000	.04	.04
	2	.077	5.012	.96	.96

a. Dependent Variable: ECd

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00594502687 4542	.01305994391 4413	.01098901098 9011	.00132263518 6720
Std. Predicted Value	-3.814	1.566	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000

Adjusted Predicted Value	.00540280761 1972	.01315527316 1829	.01098329469 1284	.00134937884 2731
Residual	- .00787286367 2674	.00697956234 2167	.00000000000 0000	.00395815260 4759
Std. Residual	-1.978	1.754	.000	.994
Stud. Residual	-2.004	1.773	.001	1.004
Deleted Residual	- .00807791762 0540	.00713928695 7681	.00000571629 7727	.00403405975 6012
Stud. Deleted Residual	-2.039	1.795	.001	1.009
Mahal. Distance	.000	14.543	.989	2.340
Cook's Distance	.000	.054	.010	.010
Centered Leverage Value	.000	.162	.011	.026

#### Residuals Statistics<sup>a</sup>

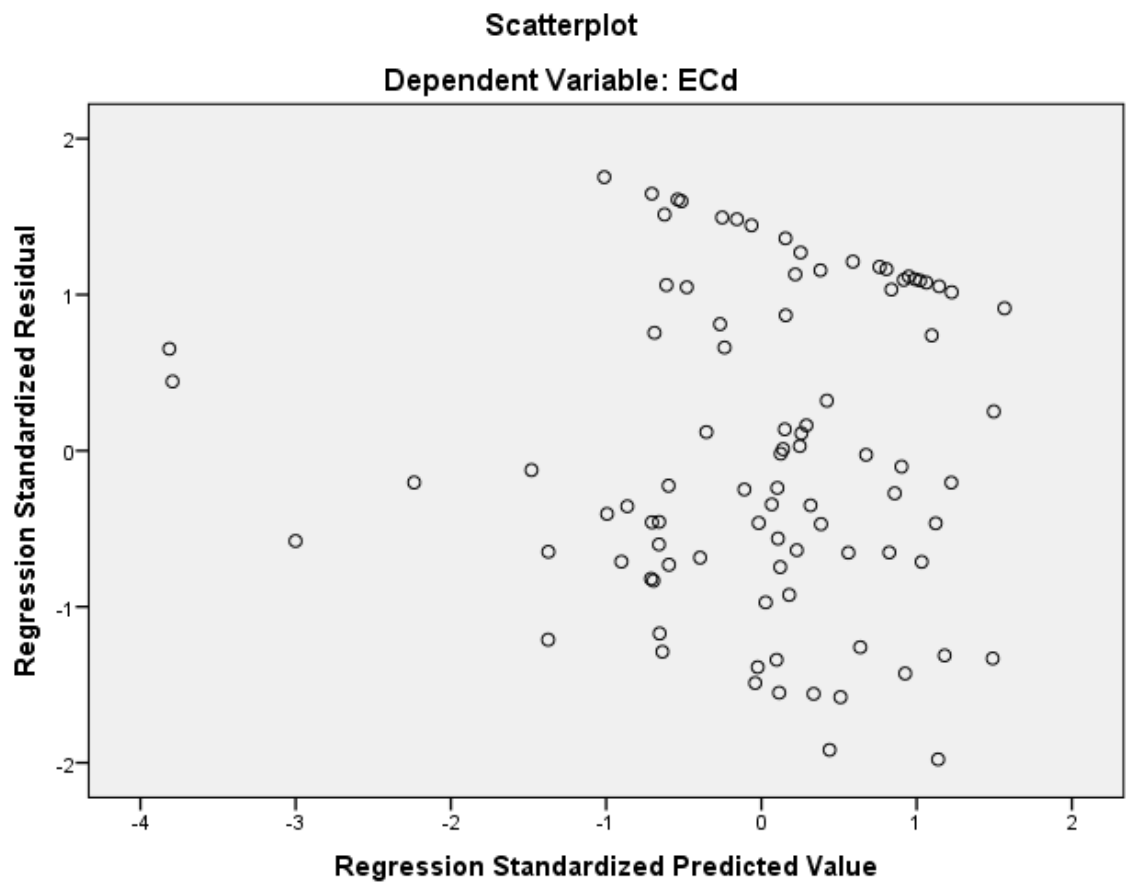
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91

Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECd

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCdN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_EVCdN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpats_d AvgPL_d
		AvgGL_d
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		,*ZPRED)
		/SAVE COOK.
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	Elapsed Time	00:00:00.22
	Memory Required	5952 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_2	
Modified		Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: PL\_EVCdN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.248 <sup>a</sup>	.062	.051	.00396743011 2518

a. Predictors: (Constant), AvgGL\_d

b. Dependent Variable: PL\_EVCdN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	5.833	.018 <sup>b</sup>
	Residual	.001	89	.000		

Total	.001	90			
-------	------	----	--	--	--

a. Dependent Variable: PL\_EVCdN

b. Predictors: (Constant), AvgGL\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.008	.001		5.784	.000
AvgGL_d	.284	.118	.248	2.415	.018

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
AvgGL_d	1.000	1.000

a. Dependent Variable: PL\_EVCdN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.024 <sup>b</sup>	.172	.864	.018	.534	1.874
	Tpaths_d	.064 <sup>b</sup>	.511	.611	.054	.686	1.458
	TSpaths_d	-.069 <sup>b</sup>	-.525	.601	-.056	.608	1.646
	AvgPL_d	.059 <sup>b</sup>	.413	.680	.044	.530	1.887

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.534	
	Tpaths_d	.686	
	TSpaths_d	.608	
	AvgPL_d	.530	

a. Dependent Variable: PL\_EVCdN

b. Predictors in the Model: (Constant), AvgGL\_d

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	AvgGL_d

1	1	1.952	1.000	.02	.02
	2	.048	6.381	.98	.98

a. Dependent Variable: PL\_EVCdN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00970983505 2490	.01477576885 3724	.01098901098 9011	.00101001867 8006
Std. Predicted Value	-1.266	3.749	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00959211308 5091	.01598024740 8152	.01100122735 2727	.00108984222 4029
Residual	- .00600054394 4538	.02253183722 4960	.00000000000 0000	.00394532726 5818
Std. Residual	-1.512	5.679	.000	.994
Stud. Residual	-1.657	5.750	-.001	1.011
Deleted Residual	- .00720502203 3304	.02309827879 0712	- .00001221636 3716	.00408212167 1697
Stud. Deleted Residual	-1.674	7.212	.022	1.133
Mahal. Distance	.000	14.056	.989	2.262
Cook's Distance	.000	.416	.018	.063

Centered Leverage Value	.000	.156	.011	.025
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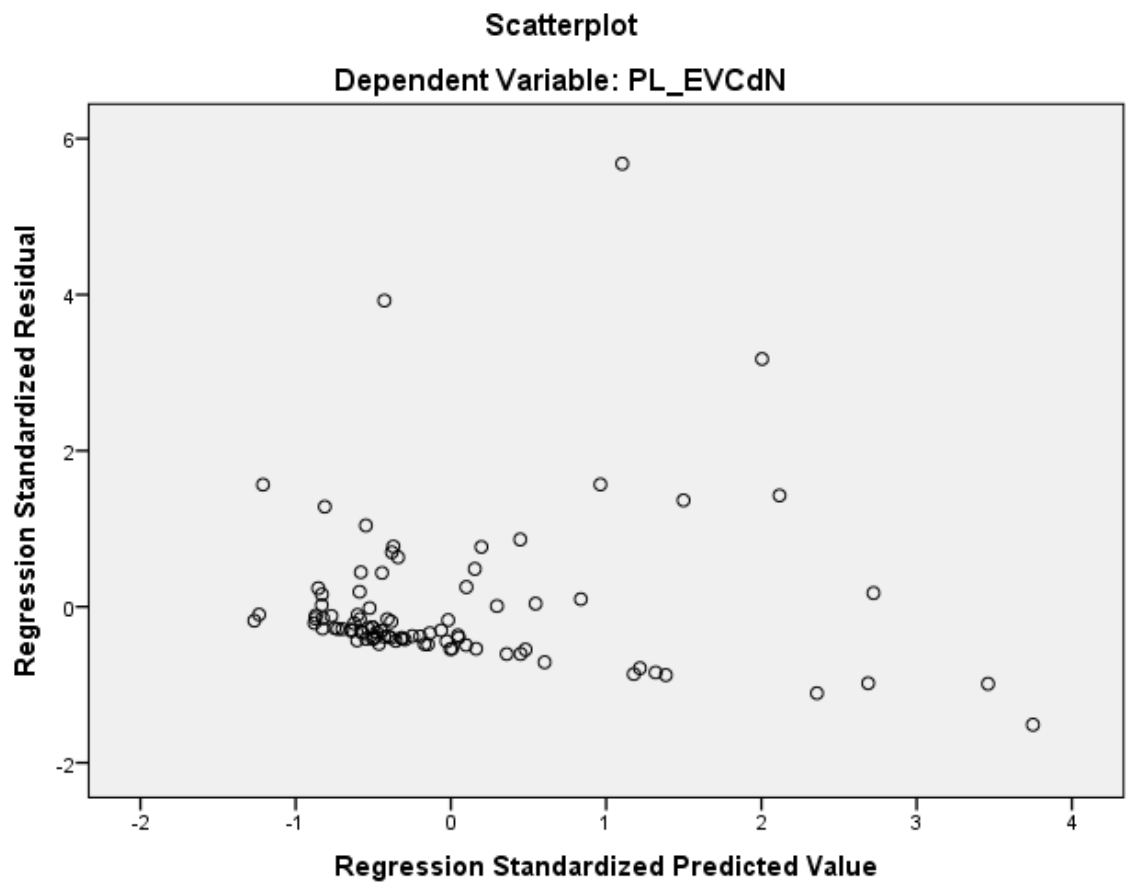
# Residuals Statistics<sup>a</sup>

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Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCdN

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCd\_TpdN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT EVCd_TpdN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01
	Memory Required	6000 bytes
	Additional Memory	
	Required for Residual	0 bytes
Variables Created or Modified	Plots	
	COO_3	Cook's Distance

Warnings

No variables were entered into the equation.

## REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCd\_TSpdN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpdN\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 06:53:37	
Comments		
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	Filter	<none>
	Weight	<none>

	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		<p>REGRESSION</p> <p>/MISSING LISTWISE</p> <p>/STATISTICS COEFF OUTS R ANOVA COLLIN TOL</p> <p>/CRITERIA=PIN(.05) POUT(.10)</p> <p>/NOORIGIN</p> <p>/DEPENDENT EVCd_TSpdN</p> <p>/METHOD=STEPWISE GD_d Tpaths_d TSpdpaths_d AvgPL_d AvgGL_d</p> <p>/SCATTERPLOT=(*ZRESID,*ZPRED)</p> <p>/SAVE COOK.</p>
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.20
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Created or Modified	COO_4	Cook's Distance
-------------------------------	-------	-----------------

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCd\_TSpdN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.237 <sup>a</sup>	.056	.045	.01656870750 9644
2	.343 <sup>b</sup>	.118	.098	.01610690752 2883

a. Predictors: (Constant), TSpdN

b. Predictors: (Constant), TSpdN, AvgPL\_d

c. Dependent Variable: EVCd\_TSpdN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	5.287	.024 <sup>b</sup>
	Residual	.024	89	.000		
	Total	.026	90			
2	Regression	.003	2	.002	5.885	.004 <sup>c</sup>
	Residual	.023	88	.000		
	Total	.026	90			

a. Dependent Variable: EVCd\_TSpdN

b. Predictors: (Constant), TSpdN

c. Predictors: (Constant), TSpaths\_d, AvgPL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.027	.017		-1.621	.109
	TSpaths_d	3.437	1.495	.237	2.299	.024
2	(Constant)	-.043	.017		-2.493	.015
	TSpaths_d	6.084	1.802	.419	3.377	.001
	AvgPL_d	-1.139	.458	-.309	-2.485	.015

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.650	1.537
	AvgPL_d	.650	1.537

a. Dependent Variable: EVCd\_TSpdN



**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.261 <sup>b</sup>	-2.218	.029	-.230	.735	1.360
	Tpaths_d	-.154 <sup>b</sup>	-.983	.328	-.104	.434	2.305
	AvgPL_d	-.309 <sup>b</sup>	-2.485	.015	-.256	.650	1.537
	AvgGL_d	-.182 <sup>b</sup>	-1.386	.169	-.146	.608	1.646
2	GD_d	.140 <sup>c</sup>	.381	.704	.041	.075	13.345
	Tpaths_d	.310 <sup>c</sup>	1.337	.185	.142	.185	5.397
	AvgGL_d	-.030 <sup>c</sup>	-.198	.844	-.021	.455	2.199

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.735
	Tpaths_d	.434
	AvgPL_d	.650
	AvgGL_d	.608
2	GD_d	.066
	Tpaths_d	.185

AvgGL_d	.455
---------	------

- a. Dependent Variable: EVCd\_TSpdN
- b. Predictors in the Model: (Constant), TSpdts\_d
- c. Predictors in the Model: (Constant), TSpdts\_d, AvgPL\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpdts_d	AvgPL_d
1	1	1.994	1.000	.00	.00	
	2	.006	18.966	1.00	1.00	
2	1	2.907	1.000	.00	.00	.01
	2	.089	5.719	.03	.01	.72
	3	.004	26.627	.97	.99	.27

- a. Dependent Variable: EVCd\_TSpdN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	-.003111674683169	.027427157387137	.010989010989011	.005824936869839

Std. Predicted Value	-2.421	2.822	.000	1.000
Standard Error of Predicted Value	.002	.007	.003	.001
Adjusted Predicted Value	- .00391883682 4596	.03052944503 7246	.01091933571 7175	.00600618068 8583
Residual	- .02742715738 7137	.04399288445 7111	.00000000000 0000	.01592693642 7066
Std. Residual	-1.703	2.731	.000	.989
Stud. Residual	-1.797	2.756	.002	1.009
Deleted Residual	- .03052944503 7246	.04478078335 5236	.00006967527 1836	.01658217619 9473
Stud. Deleted Residual	-1.820	2.866	.006	1.018
Mahal. Distance	.036	17.548	1.978	2.863
Cook's Distance	.000	.145	.014	.025
Centered Leverage Value	.000	.195	.022	.032

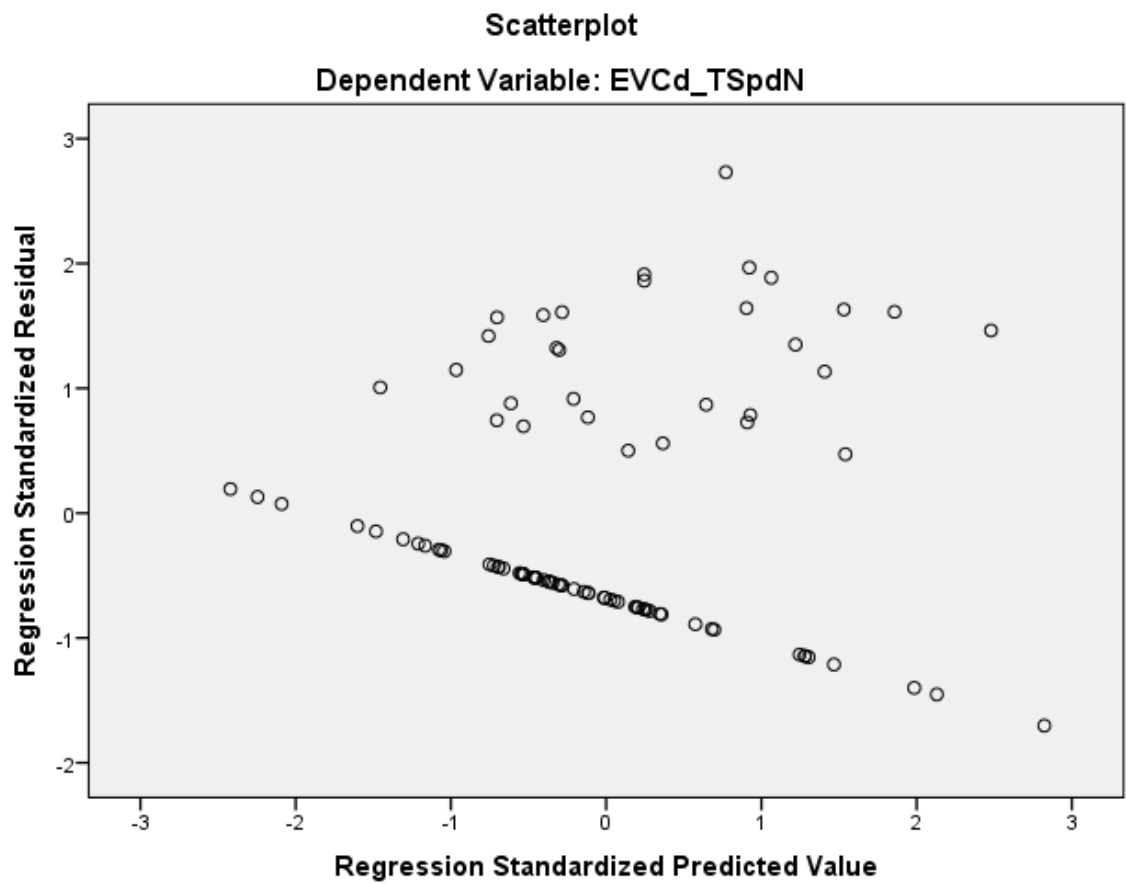
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91

Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCd\_TSpdN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_TpdN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpdN AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:43:14
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_TpdN  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.19
	Memory Required	6112 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_6	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_TpdN

#### Model Summary<sup>c</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.250 <sup>a</sup>	.062	.052	.00337574199 6914
2	.351 <sup>b</sup>	.123	.103	.00328324964 9377

a. Predictors: (Constant), Tpaths\_d

b. Predictors: (Constant), Tpaths\_d, AvgGL\_d



c. Dependent Variable: PL\_TpdN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	5.909	.017 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	6.166	.003 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			

a. Dependent Variable: PL\_TpdN

b. Predictors: (Constant), Tpaths\_d

c. Predictors: (Constant), Tpaths\_d, AvgGL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.013	.001		12.507	.000

	Tpaths_d	-.225	.092	-.250	-2.431	.017
2	(Constant)	.012	.001		9.780	.000
	Tpaths_d	-.375	.109	-.416	-3.452	.001
	AvgGL_d	.290	.118	.297	2.467	.016

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_d	1.000	1.000
2	(Constant)		
	Tpaths_d	.686	1.458
	AvgGL_d	.686	1.458

a. Dependent Variable: PL\_TpdN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.182 <sup>b</sup>	1.143	.256	.121	.417	2.400
	TSpaths_d	-.003 <sup>b</sup>	-.016	.987	-.002	.434	2.305
	AvgPL_d	.099 <sup>b</sup>	.513	.609	.055	.283	3.537

	AvgGL_d	.297 <sup>b</sup>	2.467	.016	.254	.686	1.458
2	GD_d	.000 <sup>c</sup>	-.003	.998	.000	.322	3.106
	TSpaths_d	-.166 <sup>c</sup>	-1.017	.312	-.108	.373	2.683
	AvgPL_d	-.159 <sup>c</sup>	-.741	.461	-.079	.218	4.591

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.417
	TSpaths_d	.434
	AvgPL_d	.283
	AvgGL_d	.686
2	GD_d	.322
	TSpaths_d	.373
	AvgPL_d	.218

a. Dependent Variable: PL\_TpdN

b. Predictors in the Model: (Constant), Tpaths\_d

c. Predictors in the Model: (Constant), Tpaths\_d, AvgGL\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	Tpaths_d	AvgGL_d
1	1	1.944	1.000	.03	.03	
	2	.056	5.913	.97	.97	
2	1	2.901	1.000	.01	.01	.01
	2	.056	7.203	.83	.54	.02
	3	.043	8.234	.16	.45	.97

a. Dependent Variable: PL\_TpdN

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00591449113 5627	.01453029550 6120	.01098901098 9011	.00121533583 6284
Std. Predicted Value	-4.175	2.914	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00533040985 4650	.01563073322 1769	.01099055900 5412	.00129384617 3444
Residual	- .00433287071 0641	.01286117546 2604	.00000000000 0000	.00324656414 4329
Std. Residual	-1.320	3.917	.000	.989
Stud. Residual	-1.352	4.045	.000	1.008

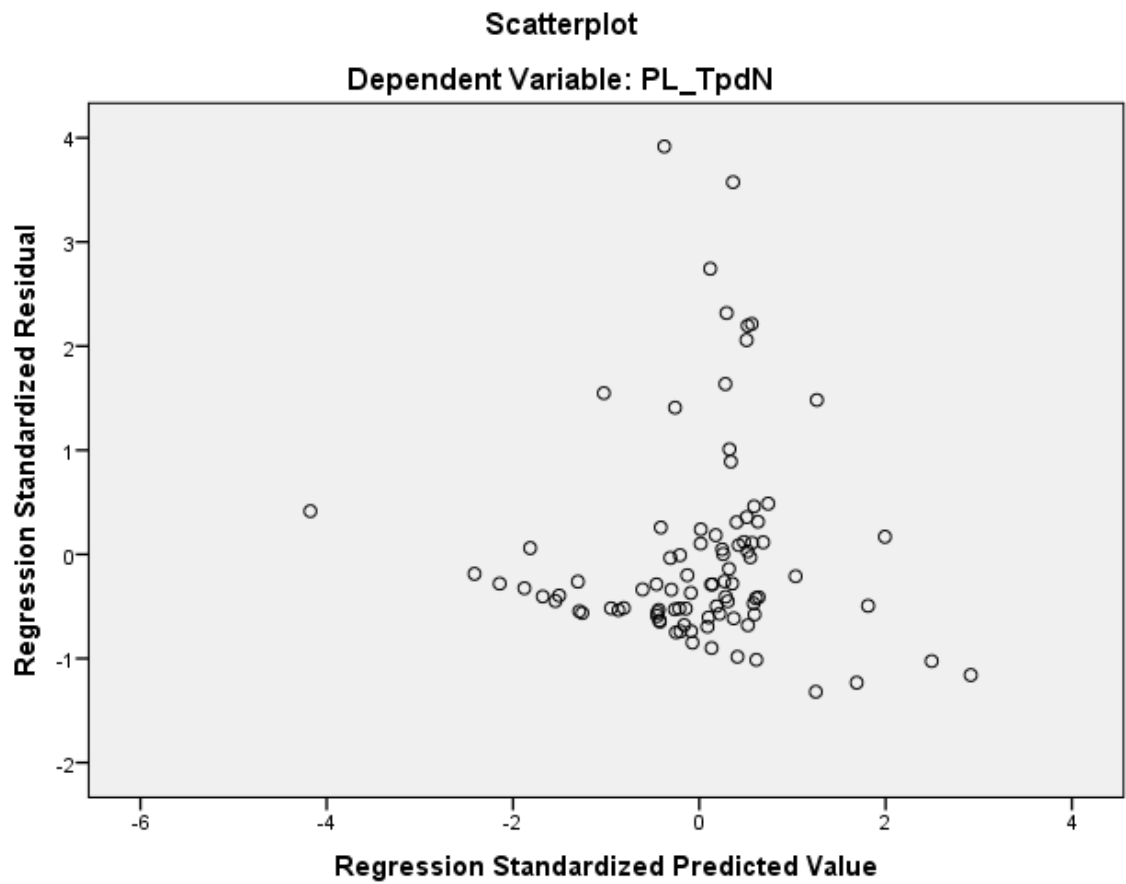
Deleted Residual	- .00490735564 3809	.01371070370 0781	- .00000154801 6401	.00337592383 2976
Stud. Deleted Residual	-1.358	4.457	.012	1.047
Mahal. Distance	.005	26.015	1.978	3.991
Cook's Distance	.000	.360	.014	.044
Centered Leverage Value	.000	.289	.022	.044

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_TpdN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL_TSpdN

/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

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Comments		
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	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_TSpdN  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.21
	Memory Required	6160 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance



**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_TSpdN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.407 <sup>a</sup>	.165	.156	.00248218197 3543
2	.609 <sup>b</sup>	.371	.357	.00216631194 3704

a. Predictors: (Constant), TSpdN

b. Predictors: (Constant), TSpdN, GD\_d

c. Dependent Variable: PL\_TSpdN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	17.627	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	25.994	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.001	90			

a. Dependent Variable: PL\_TSpdN

b. Predictors: (Constant), TSpdN

c. Predictors: (Constant), TSpdN, GD\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.021	.002		8.616	.000
	TSpaths_d	-.940	.224	-.407	-4.198	.000
2	(Constant)	.024	.002		10.706	.000
	TSpaths_d	-1.570	.228	-.679	-6.888	.000
	GD_d	.428	.080	.529	5.371	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.735	1.360
	GD_d	.735	1.360

a. Dependent Variable: PL\_TSpdN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.529 <sup>b</sup>	5.371	.000	.497	.735	1.360

	Tpaths_d	.518 <sup>b</sup>	3.776	.000	.373	.434	2.305
	AvgPL_d	.537 <sup>b</sup>	5.049	.000	.474	.650	1.537
	AvgGL_d	.255 <sup>b</sup>	2.091	.039	.218	.608	1.646
2	Tpaths_d	.105 <sup>c</sup>	.608	.545	.065	.241	4.151
	AvgPL_d	.034 <sup>c</sup>	.103	.918	.011	.066	15.085
	AvgGL_d	-.083 <sup>c</sup>	-.646	.520	-.069	.431	2.321

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.735
	Tpaths_d	.434
	AvgPL_d	.650
	AvgGL_d	.608
2	Tpaths_d	.241
	AvgPL_d	.066
	AvgGL_d	.431

a. Dependent Variable: PL\_TSpdN

b. Predictors in the Model: (Constant), TSpaths\_d

c. Predictors in the Model: (Constant), TSpaths\_d, GD\_d

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpaths_d	GD_d
1	1	1.994	1.000	.00	.00	
	2	.006	18.966	1.00	1.00	
2	1	2.946	1.000	.00	.00	.01
	2	.049	7.749	.05	.02	.83
	3	.005	25.006	.94	.98	.17

a. Dependent Variable: PL\_TSpdN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00607826327 9051	.01532398909 3304	.01098901098 9011	.00164646262 9750
Std. Predicted Value	-2.983	2.633	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00583573710 1734	.01416513510 0484	.01096425514 2082	.00160815749 2133
Residual	- .00356515566 8184	.00788307096 8091	.00000000000 0000	.00214210658 1264
Std. Residual	-1.646	3.639	.000	.989

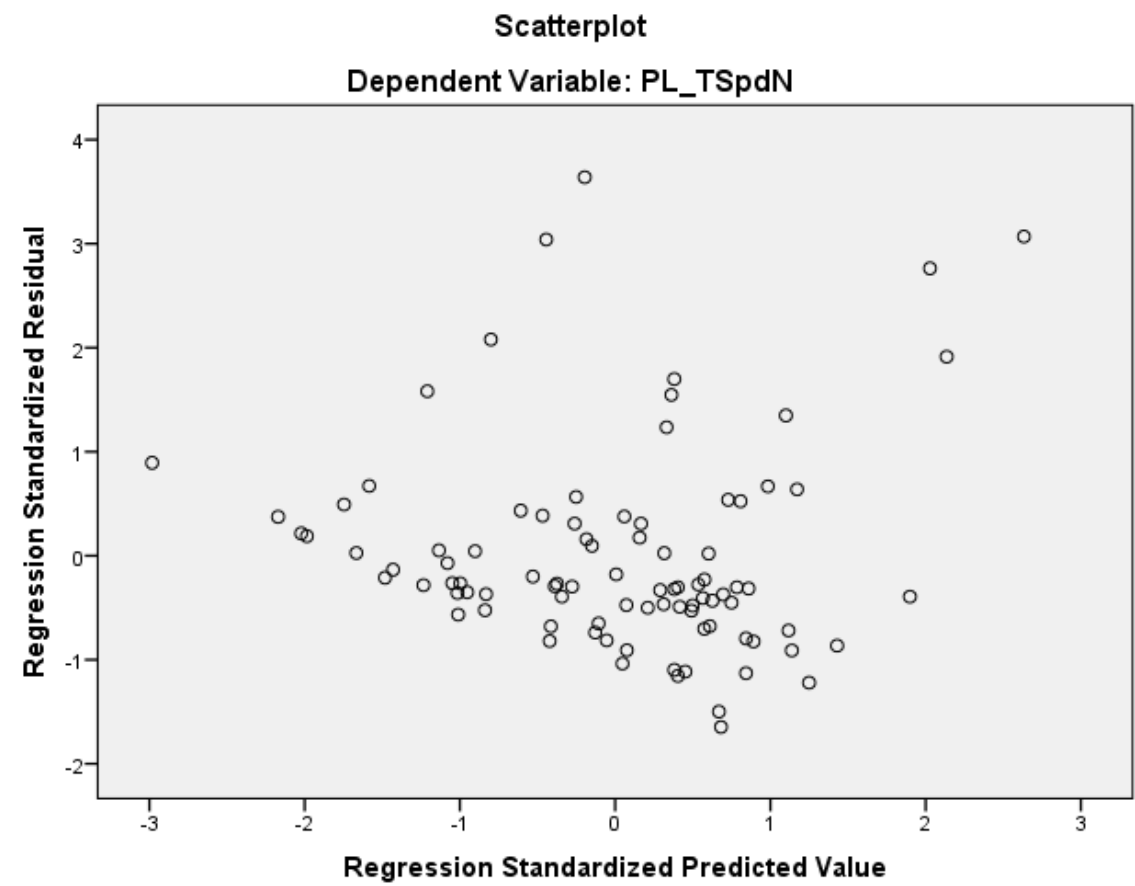
Stud. Residual	-1.838	3.680	.005	1.022
Deleted Residual	-	.00851816870	.00002475584	.00229738795
	.004444555236	2722	6929	9137
	0266			
Stud. Deleted Residual	-1.863	3.977	.016	1.056
Mahal. Distance	.006	18.784	1.978	3.189
Cook's Distance	.000	1.132	.026	.126
Centered Leverage Value	.000	.209	.022	.035

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_TSpdN

Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S\_d

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	29-MAY-2015 10:43:55	
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>



	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT S_d  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.21
	Memory Required	6192 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_8	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.211 <sup>a</sup>	.044	.034	.00156483969 9482

2	.402 <sup>b</sup>	.161	.142	.00147417299 9933
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a. Predictors: (Constant), TSpaths\_d

b. Predictors: (Constant), TSpaths\_d, AvgGL\_d

c. Dependent Variable: S\_d

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	4.133	.045 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	8.470	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: S\_d

b. Predictors: (Constant), TSpaths\_d

c. Predictors: (Constant), TSpaths\_d, AvgGL\_d

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.014	.002		9.066	.000
	TSpaths_d	-.287	.141	-.211	-2.033	.045
2	(Constant)	.016	.002		10.241	.000
	TSpaths_d	-.662	.171	-.486	-3.878	.000
	AvgGL_d	.197	.056	.439	3.505	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.608	1.646
	AvgGL_d	.608	1.646

a. Dependent Variable: S\_d

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
-------	---------	---	------	---------	-------------------------

					Correlation	Tolerance	VIF
1	GD_d	.174 <sup>b</sup>	1.449	.151	.153	.735	1.360
	Tpaths_d	-.107 <sup>b</sup>	-.680	.498	-.072	.434	2.305
	AvgPL_d	.172 <sup>b</sup>	1.346	.182	.142	.650	1.537
	AvgGL_d	.439 <sup>b</sup>	3.505	.001	.350	.608	1.646
2	GD_d	-.058 <sup>c</sup>	-.428	.670	-.046	.521	1.918
	Tpaths_d	-.204 <sup>c</sup>	-1.359	.178	-.144	.421	2.377
	AvgPL_d	-.054 <sup>c</sup>	-.385	.701	-.041	.487	2.054

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.735
	Tpaths_d	.434
	AvgPL_d	.650
	AvgGL_d	.608
2	GD_d	.431
	Tpaths_d	.373
	AvgPL_d	.455

a. Dependent Variable: S\_d

b. Predictors in the Model: (Constant), TSpats\_d

c. Predictors in the Model: (Constant), TSpats\_d, AvgGL\_d

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpaths_d	AvgGL_d
1	1	1.994	1.000	.00	.00	
	2	.006	18.966	1.00	1.00	
2	1	2.942	1.000	.00	.00	.01
	2	.054	7.408	.05	.01	.69
	3	.004	27.169	.95	.99	.30

a. Dependent Variable: S\_d

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00916973873 9729	.01271386072 0396	.01098901098 9011	.00063957797 5627
Std. Predicted Value	-2.844	2.697	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00911113992 3334	.01247648987 9191	.01099425803 4394	.00062856488 9611

Residual	- .00807108078 1519	.00251709669 8284	.00000000000 0000	.00145770127 6242
Std. Residual	-5.475	1.707	.000	.989
Stud. Residual	-5.653	1.723	-.002	1.014
Deleted Residual	- .00860577169 8058	.00256244139 7458	- .00000524704 5383	.00153217854 2337
Stud. Deleted Residual	-7.044	1.743	-.020	1.114
Mahal. Distance	.020	15.056	1.978	2.875
Cook's Distance	.000	.706	.017	.082
Centered Leverage Value	.000	.167	.022	.032

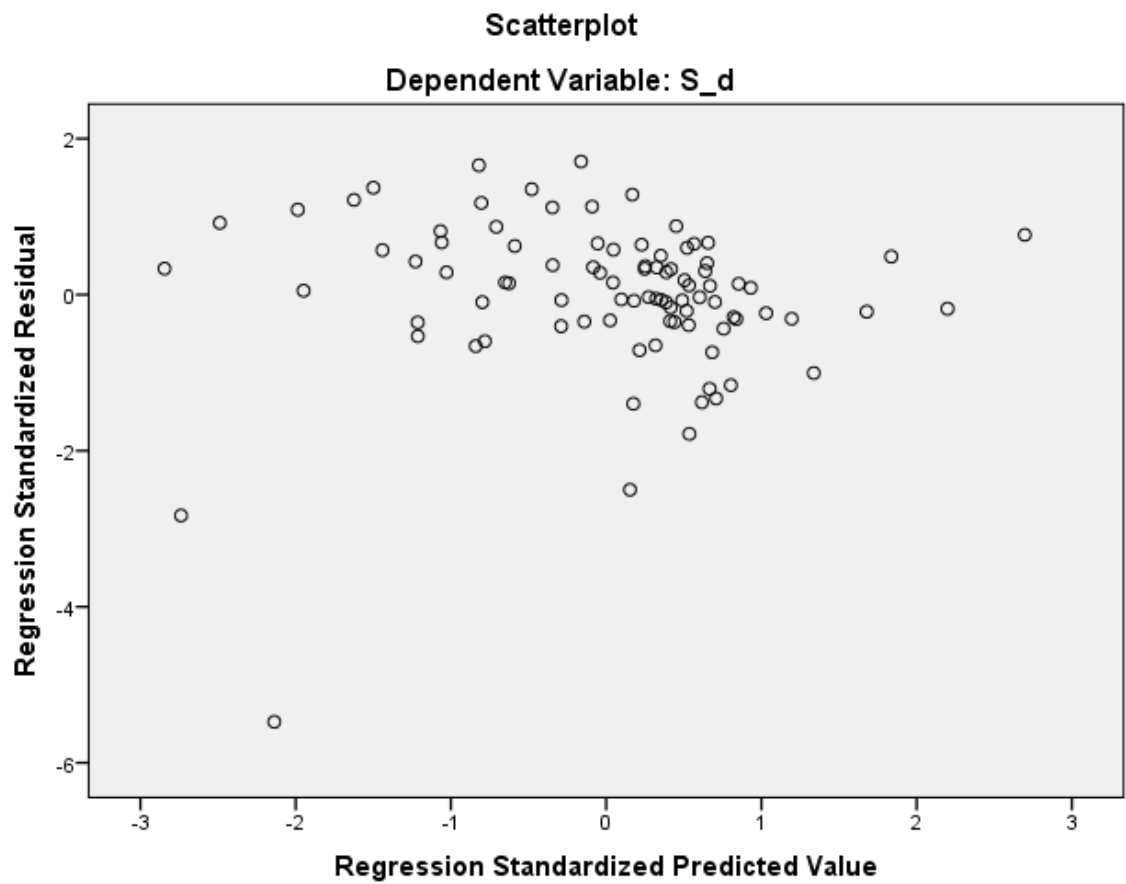
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91

Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: S\_d

## Charts





## REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT R\_d

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	29-MAY-2015 10:44:08
Comments	
Input	Active Dataset
	DataSet4

	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Missing Value Handling	Definition of Missing User-defined missing values are treated as missing.  Cases Used Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT R_d  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.23
	Memory Required	6240 bytes

	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_9	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: R\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.370 <sup>a</sup>	.137	.127	.00014631468 0116
2	.493 <sup>b</sup>	.243	.226	.00013777508 7425

a. Predictors: (Constant), GD\_d

b. Predictors: (Constant), GD\_d, TSpaths\_d

c. Dependent Variable: R\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	14.135	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	14.158	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: R\_d

b. Predictors: (Constant), GD\_d

c. Predictors: (Constant), GD\_d, TSpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		203.777	.000
	GD_d	.017	.005	.370	3.760	.000
2	(Constant)	.011	.000		80.512	.000
	GD_d	.027	.005	.566	5.234	.000
	TSpaths_d	-.051	.014	-.380	-3.518	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.735	1.360
	TSpaths_d	.735	1.360

a. Dependent Variable: R\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.429 <sup>b</sup>	-2.928	.004	-.298	.417	2.400
	TSpaths_d	-.380 <sup>b</sup>	-3.518	.001	-.351	.735	1.360
	AvgPL_d	-.268 <sup>b</sup>	-.764	.447	-.081	.079	12.624
	AvgGL_d	-.062 <sup>b</sup>	-.460	.647	-.049	.534	1.874
2	Tpaths_d	-.174 <sup>c</sup>	-.920	.360	-.098	.241	4.151
	AvgPL_d	.239 <sup>c</sup>	.662	.510	.071	.066	15.085
	AvgGL_d	.166 <sup>c</sup>	1.176	.243	.125	.431	2.321

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	Tpaths_d	.417	
	TSpaths_d	.735	
	AvgPL_d	.079	
	AvgGL_d	.534	
2	Tpaths_d	.241	

AvgPL_d	.066
AvgGL_d	.431

- a. Dependent Variable: R\_d
- b. Predictors in the Model: (Constant), GD\_d
- c. Predictors in the Model: (Constant), GD\_d, TSpats\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	GD_d	TSpats_d
1	1	1.957	1.000	.02	.02	
	2	.043	6.762	.98	.98	
2	1	2.946	1.000	.00	.01	.00
	2	.049	7.749	.05	.83	.02
	3	.005	25.006	.94	.17	.98

- a. Dependent Variable: R\_d

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
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Predicted Value	.01080713886 7676	.01130137033 7605	.01098901098 9011	.00007728027 1503
Std. Predicted Value	-2.353	4.042	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.01083073858 1717	.01132345106 4527	.01098974278 5471	.00007798884 8923
Residual	- .00050855567 6788	.00027328121 3595	.00000000000 0000	.00013623565 2656
Std. Residual	-3.691	1.984	.000	.989
Stud. Residual	-3.762	2.033	-.003	1.008
Deleted Residual	- .00052811333 4440	.00028708271 5658	- .00000073179 6460	.00014154881 1034
Stud. Deleted Residual	-4.083	2.071	-.010	1.039
Mahal. Distance	.006	18.784	1.978	3.189
Cook's Distance	.000	.236	.013	.034
Centered Leverage Value	.000	.209	.022	.035

#### Residuals Statistics<sup>a</sup>

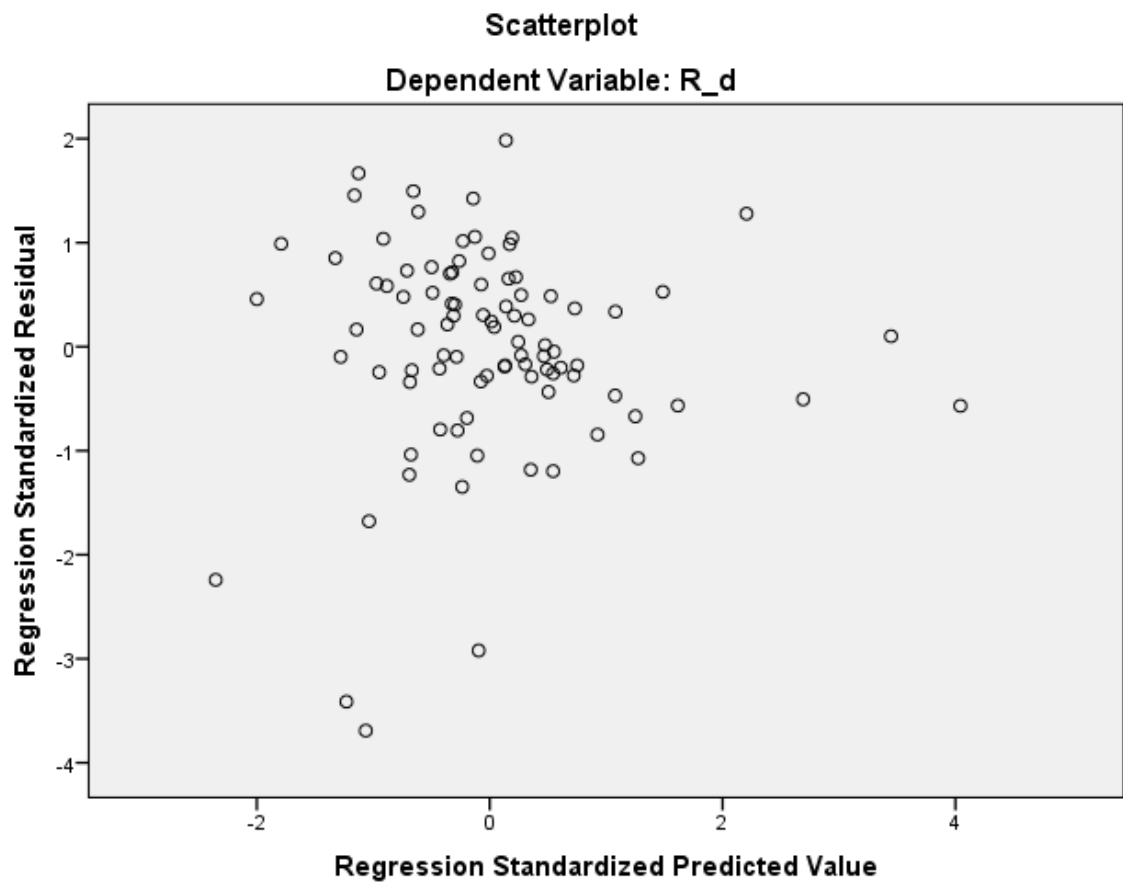
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91



Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: R\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT SMSP\_d

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:44:23
Comments		
Input	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT SMSP_d  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.21
	Memory Required	6272 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_10	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: SMSP\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.339 <sup>a</sup>	.115	.105	.02279852247 0116

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: SMSP\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.006	1	.006	11.519	.001 <sup>b</sup>
	Residual	.046	89	.001		

Total	.052	90			
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a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), TSpaths\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.088	.023		3.859	.000
TSpaths_d	-6.980	2.057	-.339	-3.394	.001

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
TSpaths_d	1.000	1.000

a. Dependent Variable: SMSP\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.083 <sup>b</sup>	.712	.479	.076	.735	1.360
	Tpaths_d	.261 <sup>b</sup>	1.743	.085	.183	.434	2.305
	AvgPL_d	.195 <sup>b</sup>	1.589	.116	.167	.650	1.537
	AvgGL_d	.002 <sup>b</sup>	.018	.986	.002	.608	1.646

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.735	
	Tpaths_d	.434	
	AvgPL_d	.650	
	AvgGL_d	.608	

a. Dependent Variable: SMSP\_d

b. Predictors in the Model: (Constant), TSpats\_d

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpats_d

1	1	1.994	1.000	.00	.00
	2	.006	18.966	1.00	1.00

a. Dependent Variable: SMSP\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .01213468331 8436	.02586344815 7907	.01098901098 9011	.00815623291 4568
Std. Predicted Value	-2.835	1.824	.000	1.000
Standard Error of Predicted Value	.002	.007	.003	.001
Adjusted Predicted Value	- .01354111451 6556	.02529736794 5313	.01088943644 1600	.00819675353 9044
Residual	- .01874438486 9933	.16464711725 7118	.00000000000 0000	.02267151021 4613
Std. Residual	-.822	7.222	.000	.994
Stud. Residual	-.840	7.391	.002	1.012
Deleted Residual	- .01955435983 8367	.17247210443 0199	.00009957454 7411	.02349961082 9365
Stud. Deleted Residual	-.838	11.828	.057	1.416
Mahal. Distance	.000	8.038	.989	1.447



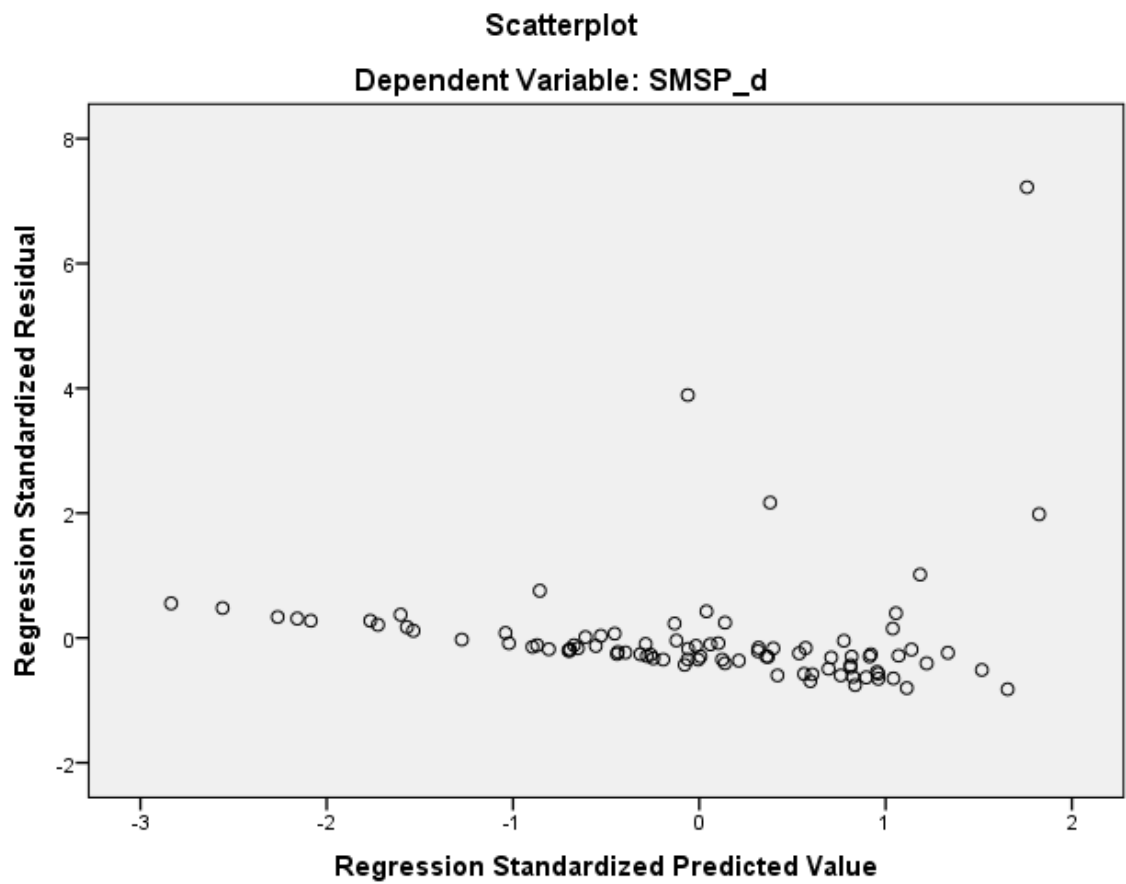
Cook's Distance	.000	1.298	.019	.136
Centered Leverage Value	.000	.089	.011	.016

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: SMSP\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT SMSP\_d

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:59:31
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Input	Active Dataset	DataSet4
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT SMSP_d
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpats_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.17
	Memory Required	6320 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_11	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	TSpats_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: SMSP\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.317 <sup>a</sup>	.100	.090	.01424730030 1966

a. Predictors: (Constant), TSpats\_d

b. Dependent Variable: SMSP\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	9.800	.002 <sup>b</sup>
	Residual	.018	88	.000		

Total	.020	89			
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a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), TSpaths\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.054	.014		3.735	.000
TSpaths_d	-4.095	1.308	-.317	-3.130	.002

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
TSpaths_d	1.000	1.000

a. Dependent Variable: SMSP\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.012 <sup>b</sup>	-.100	.921	-.011	.727	1.375
	Tpaths_d	.211 <sup>b</sup>	1.378	.172	.146	.430	2.328
	AvgPL_d	.090 <sup>b</sup>	.709	.481	.076	.635	1.574
	AvgGL_d	.027 <sup>b</sup>	.206	.837	.022	.618	1.619

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.727	
	Tpaths_d	.430	
	AvgPL_d	.635	
	AvgGL_d	.618	

a. Dependent Variable: SMSP\_d

b. Predictors in the Model: (Constant), TSpats\_d

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpats_d

1	1	1.995	1.000	.00	.00
	2	.005	19.237	1.00	1.00

a. Dependent Variable: SMSP\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00447298074 1411	.01782055944 2043	.00900018520 1567	.00472769838 0023
Std. Predicted Value	-2.850	1.866	.000	1.000
Standard Error of Predicted Value	.002	.005	.002	.001
Adjusted Predicted Value	- .00503797875 7173	.01752441003 9186	.00897301440 5219	.00474373180 8548
Residual	- .01264875568 4495	.09040001034 7366	.00000000000 0000	.01416703318 2673
Std. Residual	-.888	6.345	.000	.994
Stud. Residual	-.900	6.381	.001	1.005
Deleted Residual	- .01298505160 9576	.09141764789 8197	.00002717079 6348	.01446193681 5868
Stud. Deleted Residual	-.899	8.655	.035	1.204
Mahal. Distance	.000	8.122	.989	1.454



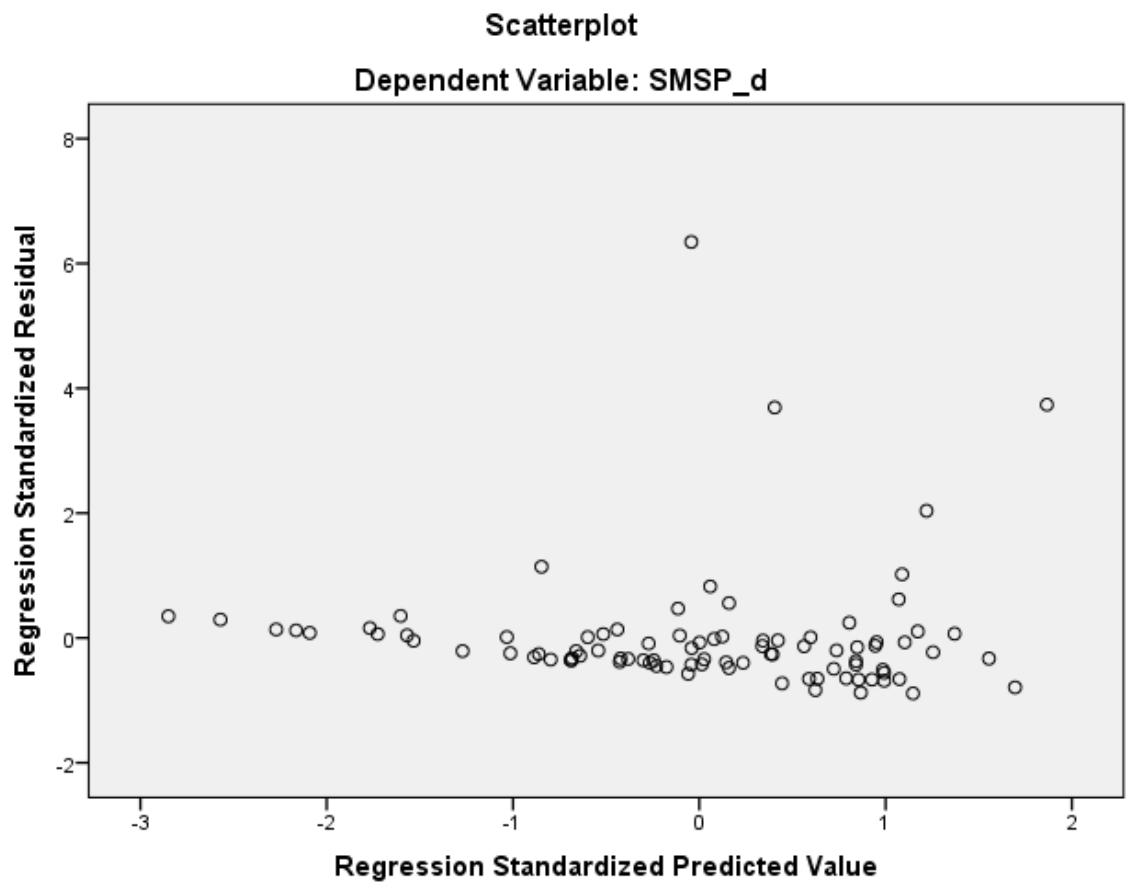
Cook's Distance	.000	.389	.010	.048
Centered Leverage Value	.000	.091	.011	.016

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: SMSP\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S\_d

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:59:58
Comments		
Input	Active Dataset	DataSet4
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	89
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT S_d  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.19
	Memory Required	6352 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_12	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.221 <sup>a</sup>	.049	.038	.00155543736 3749
2	.426 <sup>b</sup>	.182	.163	.00145109215 3614

a. Predictors: (Constant), TSpaths\_d

b. Predictors: (Constant), TSpaths\_d, AvgGL\_d

c. Dependent Variable: S\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	4.450	.038 <sup>b</sup>
	Residual	.000	87	.000		
	Total	.000	88			
2	Regression	.000	2	.000	9.538	.000 <sup>c</sup>
	Residual	.000	86	.000		
	Total	.000	88			

a. Dependent Variable: S\_d

b. Predictors: (Constant), TSpaths\_d

c. Predictors: (Constant), TSpaths\_d, AvgGL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.014	.002		9.054	.000

	TSpaths_d	-.302	.143	-.221	-2.110	.038
2	(Constant)	.016	.002		10.397	.000
	TSpaths_d	-.692	.170	-.505	-4.081	.000
	AvgGL_d	.208	.056	.462	3.737	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.622	1.607
	AvgGL_d	.622	1.607

a. Dependent Variable: S\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.303 <sup>b</sup>	2.515	.014	.262	.708	1.412
	Tpaths_d	-.007 <sup>b</sup>	-.043	.965	-.005	.405	2.469
	AvgPL_d	.317 <sup>b</sup>	2.433	.017	.254	.610	1.640

	AvgGL_d	.462 <sup>b</sup>	3.737	.000	.374	.622	1.607
2	GD_d	.092 <sup>c</sup>	.655	.514	.071	.491	2.036
	Tpaths_d	-.090 <sup>c</sup>	-.580	.563	-.063	.397	2.519
	AvgPL_d	.105 <sup>c</sup>	.720	.473	.078	.449	2.225

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.708
	Tpaths_d	.405
	AvgPL_d	.610
	AvgGL_d	.622
2	GD_d	.431
	Tpaths_d	.351
	AvgPL_d	.449

a. Dependent Variable: S\_d

b. Predictors in the Model: (Constant), TSpaths\_d

c. Predictors in the Model: (Constant), TSpaths\_d, AvgGL\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------



			Index	(Constant)	TSpaths_d	AvgGL_d
1	1	1.995	1.000	.00	.00	
	2	.005	19.181	1.00	1.00	
2	1	2.943	1.000	.00	.00	.01
	2	.053	7.446	.05	.01	.71
	3	.004	27.204	.95	.99	.29

a. Dependent Variable: S\_d

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00913331005 7223	.01286955457 1807	.01102816122 9215	.00067560072 2381
Std. Predicted Value	-2.805	2.726	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00906987674 5343	.01265825517 4756	.01103370232 3742	.00066585030 8747
Residual	- .00805336702 6150	.00247871805 9137	.00000000000 0000	.00143450769 8623
Std. Residual	-5.550	1.708	.000	.989
Stud. Residual	-5.731	1.724	-.002	1.014

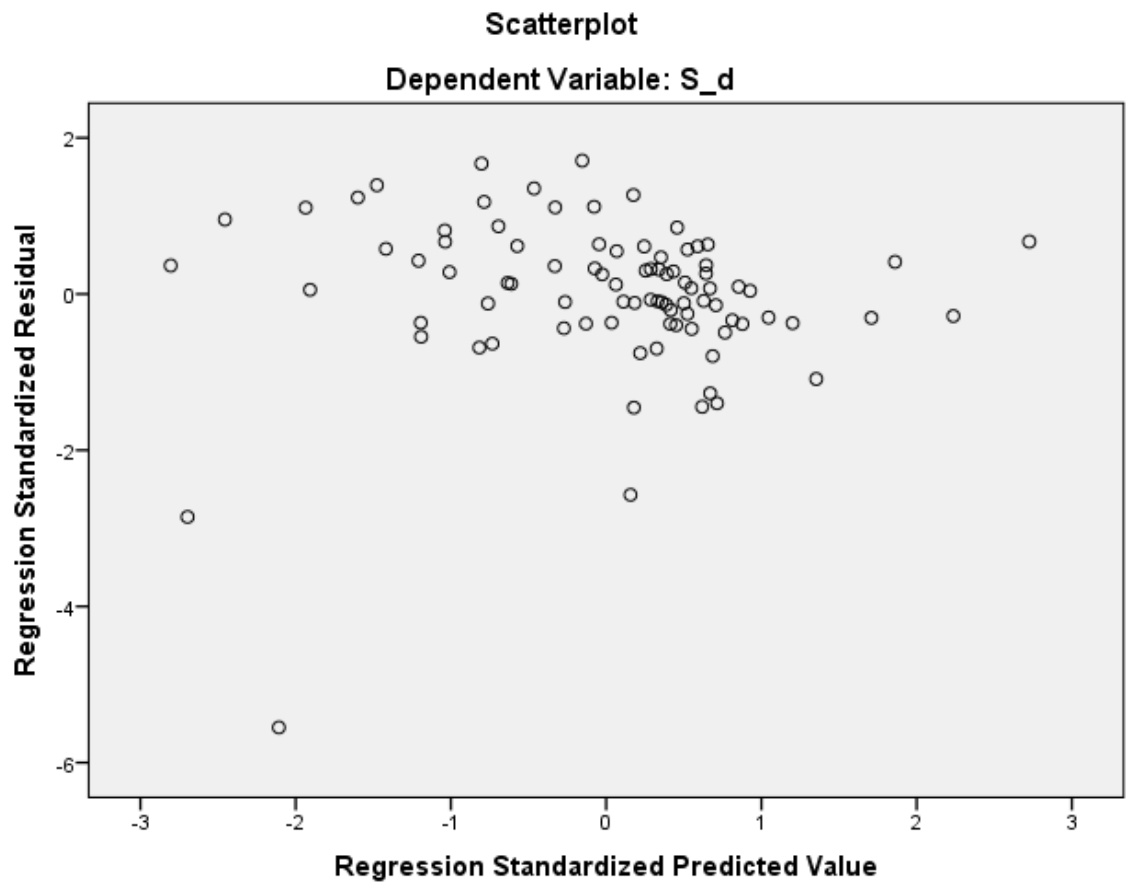
Deleted Residual	- .00858810730 2785	.00252477498 7251	- .00000554109 4527	.00150936173 7303
Stud. Deleted Residual	-7.247	1.744	-.021	1.127
Mahal. Distance	.023	15.199	1.978	2.913
Cook's Distance	.000	.727	.018	.085
Centered Leverage Value	.000	.173	.022	.033

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	89
Std. Predicted Value	89
Standard Error of Predicted Value	89
Adjusted Predicted Value	89
Residual	89
Std. Residual	89
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	89
Cook's Distance	89
Centered Leverage Value	89

a. Dependent Variable: S\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT GD_d

/METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION
		/MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT GD_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID,*ZPRED)  /SAVE COOK.
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Variables Created or Modified	COO_1	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	R_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: GD\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.370 <sup>a</sup>	.137	.127	.00312134708 0747

a. Predictors: (Constant), R\_d

b. Dependent Variable: GD\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	14.135	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: GD\_d

b. Predictors: (Constant), R\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.076	.023		-3.283	.001
	R_d	7.898	2.101	.370	3.760	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_d	1.000	1.000

a. Dependent Variable: GD\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	-.193 <sup>b</sup>	-1.952	.054	-.204	.963	1.038
	PL_TSpdN	.109 <sup>b</sup>	1.085	.281	.115	.958	1.044
	S_d	-.196 <sup>b</sup>	-1.779	.079	-.186	.782	1.278
	SMSP_d	-.140 <sup>b</sup>	-1.425	.158	-.150	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpdN	.963	
	PL_TSpdN	.958	
	S_d	.782	
	SMSP_d	.995	

a. Dependent Variable: GD\_d

b. Predictors in the Model: (Constant), R\_d



### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_d
1	1	2.000	1.000	.00	.00
	2	.000	141.104	1.00	1.00

a. Dependent Variable: GD\_d

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00632313778 6239	.01372678019 1064	.01098901098 9011	.00123700294 0346
Std. Predicted Value	-3.772	2.213	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00542184803 6349	.01339736022 0551	.01095812355 9333	.00128964046 9752
Residual	- .00491310702 6368	.01249615009 8741	.00000000000 0000	.00310395782 5217
Std. Residual	-1.574	4.003	.000	.994
Stud. Residual	-1.583	4.043	.005	1.011
Deleted Residual	- .00496786786 2433	.01274667866 5280	.00003088742 9678	.00320679036 5384

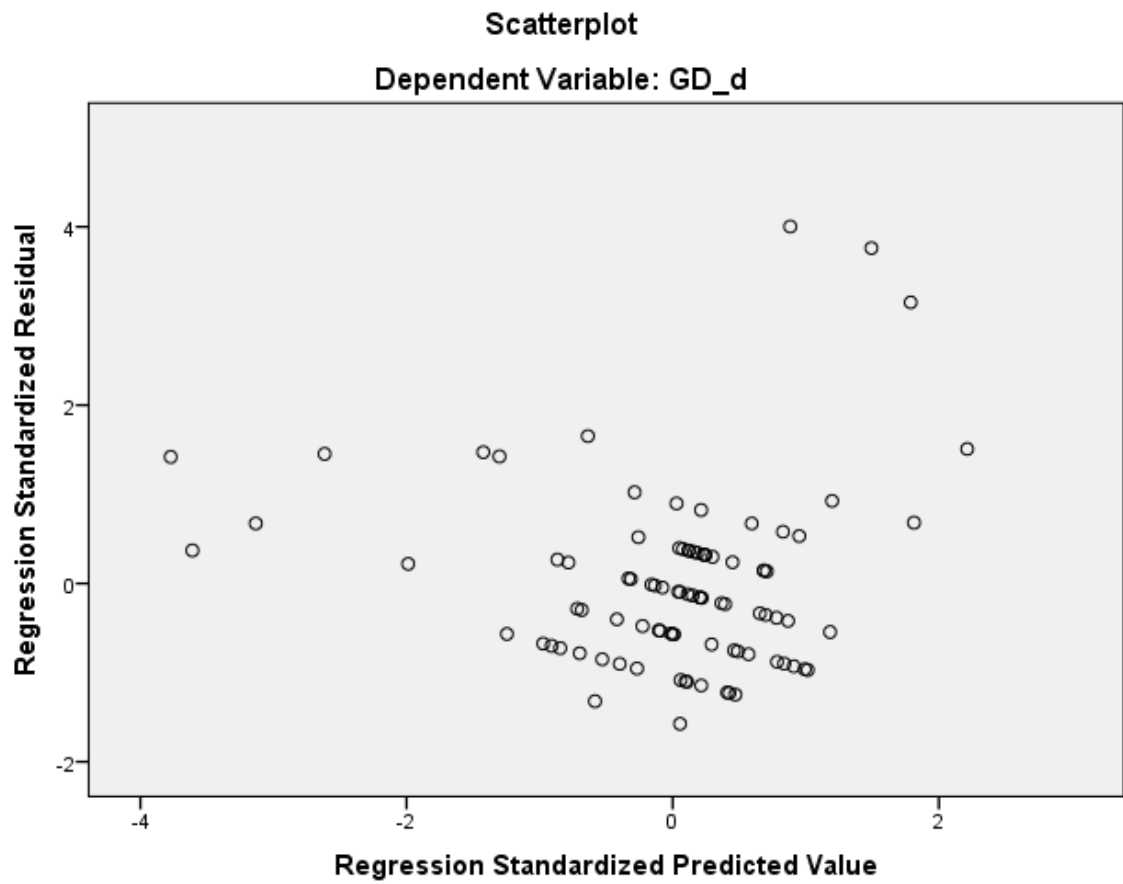
Stud. Deleted Residual	-1.596	4.450	.016	1.052
Mahal. Distance	.000	14.227	.989	2.398
Cook's Distance	.000	.272	.017	.050
Centered Leverage Value	.000	.158	.011	.027

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: GD\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Tpaths\_d

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Split File	<none>
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Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.
		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT Tpaths_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.21
	Memory Required	5952 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_2	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	PL_TpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: Tpaths\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.250 <sup>a</sup>	.062	.052	.00374685969 9246

a. Predictors: (Constant), PL\_TpdN

b. Dependent Variable: Tpaths\_d

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
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1	Regression	.000	1	.000	5.909	.017 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: Tpaths\_d

b. Predictors: (Constant), PL\_TpdN

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.014	.001		10.694	.000
PL_TpdN	-.277	.114	-.250	-2.431	.017

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1 (Constant)			
PL_TpdN		1.000	1.000

a. Dependent Variable: Tpaths\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpdN	-.045 <sup>b</sup>	-.427	.671	-.045	.977	1.023
	S_d	-.163 <sup>b</sup>	-1.572	.120	-.165	.963	1.038
	R_d	.158 <sup>b</sup>	1.518	.133	.160	.963	1.038
	SMSP_d	-.146 <sup>b</sup>	-1.432	.156	-.151	1.000	1.000

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TSpdN	.977	
	S_d	.963	
	R_d	.963	
	SMSP_d	1.000	

a. Dependent Variable: Tpaths\_d

b. Predictors in the Model: (Constant), PL\_TpdN

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition	Variance Proportions
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		Index	(Constant)	PL_TpdN
1	1	1.954	1.000	.02
	2	.046	6.528	.98

a. Dependent Variable: Tpaths\_d

# Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00755370827 3917	.01201704423 8746	.01098901098 9011	.00096008175 3811
Std. Predicted Value	-3.578	1.071	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00571411428 9731	.01188808586 4484	.01094980871 4468	.00108170013 4223
Residual	- .00382619630 5454	.01832375489 1753	.00000000000 0000	.00372598566 6638
Std. Residual	-1.021	4.890	.000	.994
Stud. Residual	-1.027	4.950	.005	1.014
Deleted Residual	- .00387113867 3276	.01876912079 7515	.00003920227 4543	.00387496572 2694
Stud. Deleted Residual	-1.027	5.781	.020	1.073
Mahal. Distance	.000	12.803	.989	2.160

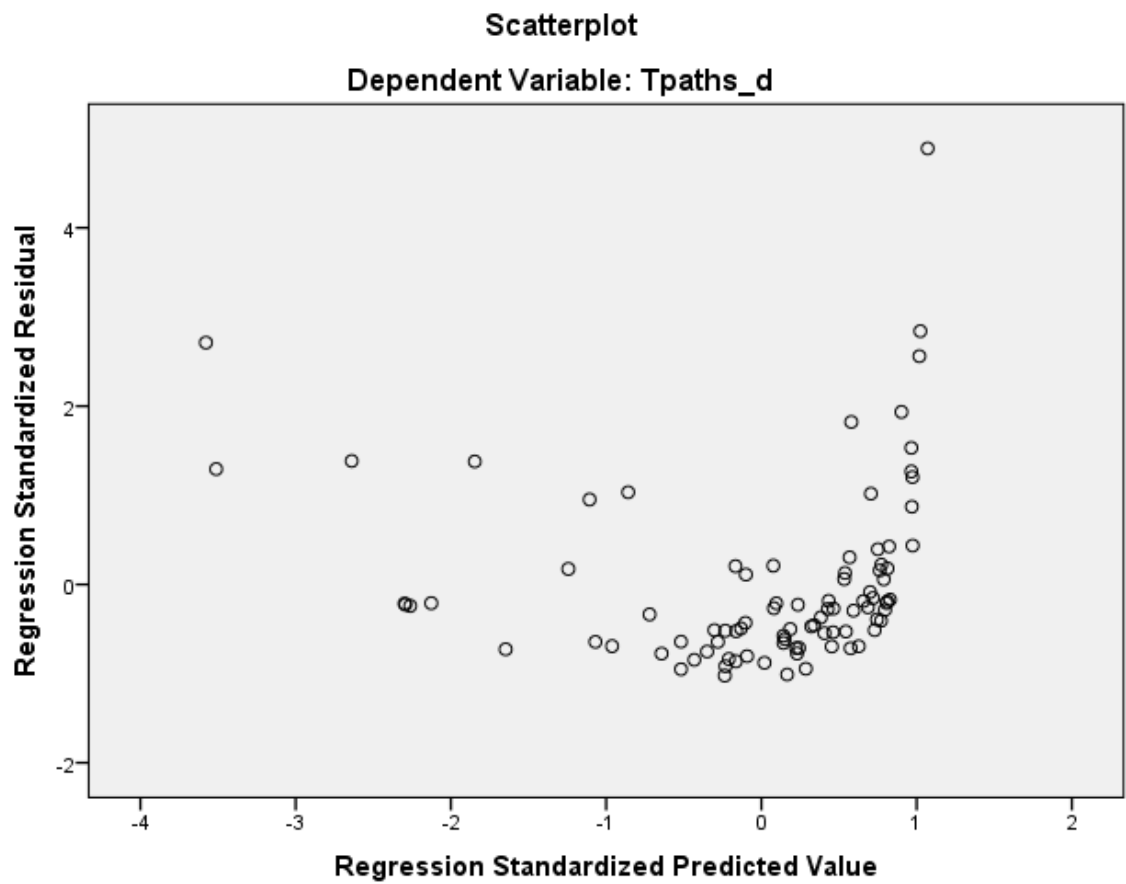
Cook's Distance	.000	.786	.021	.090
Centered Leverage Value	.000	.142	.011	.024

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: Tpaths\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Tpaths\_d

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

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/SCATTERPLOT=(*ZRESID ,*ZPRED)
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/SAVE COOK.
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## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT TSpaths_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.17
	Elapsed Time		00:00:00.16
	Memory Required	6000 bytes	
	Additional Memory Required for Residual Plots	0 bytes	
Variables Created or Modified	COO_3	Cook's Distance	

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	PL_TSpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: TSpdN\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.407 <sup>a</sup>	.165	.156	.00107351991 6205
2	.494 <sup>b</sup>	.244	.227	.00102716482 6507

a. Predictors: (Constant), PL\_TSpdN

b. Predictors: (Constant), PL\_TSpdN, SMSP\_d

c. Dependent Variable: TSpaths\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	17.627	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	14.234	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: TSpaths\_d

b. Predictors: (Constant), PL\_TSpdN

c. Predictors: (Constant), PL\_TSpdN, SMSP\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.013	.000		27.271	.000

	PL_TSpdN	-.176	.042	-.407	-4.198	.000
2	(Constant)	.013	.000		28.375	.000
	PL_TSpdN	-.158	.041	-.364	-3.889	.000
	SMSP_d	-.014	.005	-.284	-3.035	.003

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TSpdN	1.000	1.000
2	(Constant)		
	PL_TSpdN	.978	1.023
	SMSP_d	.978	1.023

a. Dependent Variable: TSpdhs\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	-.130 <sup>b</sup>	-1.336	.185	-.141	.977	1.023
	S_d	-.175 <sup>b</sup>	-1.827	.071	-.191	.992	1.008
	R_d	-.006 <sup>b</sup>	-.065	.949	-.007	.958	1.044



	SMSP_d	-.284 <sup>b</sup>	-3.035	.003	-.308	.978	1.023
2	PL_TpdN	-.143 <sup>c</sup>	-1.530	.130	-.162	.975	1.025
	S_d	-.173 <sup>c</sup>	-1.889	.062	-.199	.992	1.008
	R_d	.005 <sup>c</sup>	.057	.955	.006	.957	1.045

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	.977
	S_d	.992
	R_d	.958
	SMSP_d	.978
2	PL_TpdN	.954
	S_d	.970
	R_d	.940

a. Dependent Variable: TSpats\_d

b. Predictors in the Model: (Constant), PL\_TSpdN

c. Predictors in the Model: (Constant), PL\_TSpdN, SMSP\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	PL_TSpdN	SMSP_d
1	1	1.971	1.000	.01	.01	
	2	.029	8.300	.99	.99	
2	1	2.261	1.000	.01	.01	.07
	2	.711	1.783	.01	.01	.92
	3	.028	8.929	.98	.98	.01

a. Dependent Variable: TSpdN\_d

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00816166773 4385	.01160679385 0660	.01098901098 9011	.00057769146 9366
Std. Predicted Value	-4.894	1.069	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00687519693 7472	.01157467253 5062	.01096049190 2702	.00068443845 6324
Residual	- .00152314989 8276	.00271668843 9250	.00000000000 0000	.00101568776 4312
Std. Residual	-1.483	2.645	.000	.989
Stud. Residual	-1.503	2.763	.012	1.016

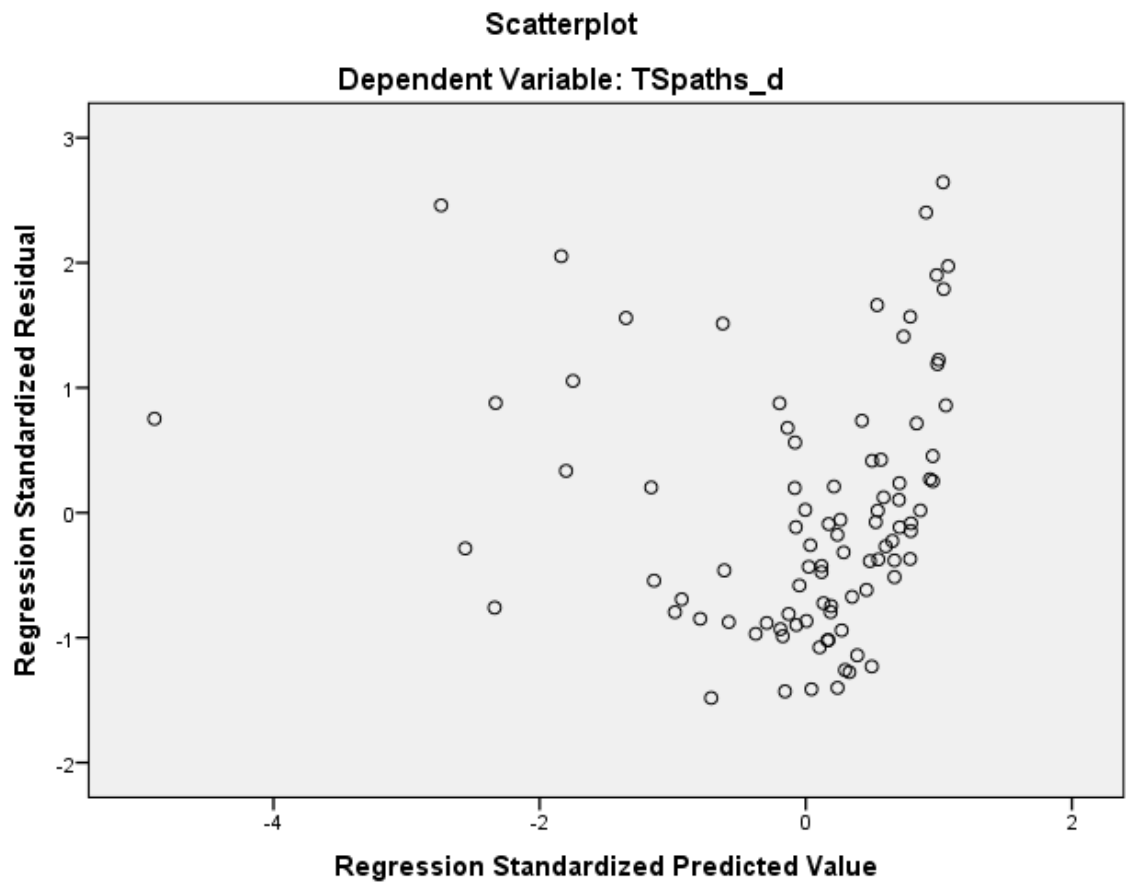
Deleted Residual	- .00156539177 9877	.00318661052 7337	.00002851908 6309	.00108305118 9170
Stud. Deleted Residual	-1.514	2.874	.017	1.029
Mahal. Distance	.008	55.260	1.978	6.398
Cook's Distance	.000	.837	.026	.113
Centered Leverage Value	.000	.614	.022	.071

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: TSpats\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgPL_d

/METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

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## Regression

### Notes

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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgPL_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.19
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	R_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	PL_TpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgPL\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.334 <sup>a</sup>	.112	.102	.004352923517373
2	.418 <sup>b</sup>	.175	.156	.004218577297029

a. Predictors: (Constant), R\_d

b. Predictors: (Constant), R\_d, PL\_TpdN

c. Dependent Variable: AvgPL\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	11.177	.001 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			
2	Regression	.000	2	.000	9.329	.000 <sup>c</sup>
	Residual	.002	88	.000		
	Total	.002	90			

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), R\_d

c. Predictors: (Constant), R\_d, PL\_TpdN

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------



		B	Std. Error	Beta		
1	(Constant)	-.097	.032		-3.002	.003
	R_d	9.794	2.929	.334	3.343	.001
2	(Constant)	-.109	.032		-3.446	.001
	R_d	11.231	2.892	.383	3.883	.000
	PL_TpdN	-.340	.131	-.256	-2.600	.011

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_d	1.000	1.000
2	(Constant)		
	R_d	.963	1.038
	PL_TpdN	.963	1.038

a. Dependent Variable: AvgPL\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	-.256 <sup>b</sup>	-2.600	.011	-.267	.963	1.038

	PL_TSpdN	.042 <sup>b</sup>	.413	.680	.044	.958	1.044
	S_d	-.215 <sup>b</sup>	-1.933	.056	-.202	.782	1.278
	SMSP_d	-.097 <sup>b</sup>	-.971	.334	-.103	.995	1.005
2	PL_TSpdN	.073 <sup>c</sup>	.735	.464	.079	.945	1.058
	S_d	-.184 <sup>c</sup>	-1.685	.096	-.178	.771	1.296
	SMSP_d	-.106 <sup>c</sup>	-1.089	.279	-.116	.994	1.006

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	.963
	PL_TSpdN	.958
	S_d	.782
	SMSP_d	.995
2	PL_TSpdN	.932
	S_d	.771
	SMSP_d	.958

a. Dependent Variable: AvgPL\_d

b. Predictors in the Model: (Constant), R\_d

c. Predictors in the Model: (Constant), R\_d, PL\_TpdN

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_d	PL_TpdN
1	1	2.000	1.000	.00	.00	
	2	.000	141.104	1.00	1.00	
2	1	2.939	1.000	.00	.00	.01
	2	.060	6.972	.00	.00	.96
	3	9.756E-5	173.577	1.00	1.00	.03

a. Dependent Variable: AvgPL\_d

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00550072826 4451	.01556447520 8521	.01098901098 9011	.00192082895 8596
Std. Predicted Value	-2.857	2.382	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00436192052 4389	.01508912350 9824	.01090635064 2642	.00202252913 0498
Residual	- .00666617928 0728	.01469897944 4802	.00000000000 0000	.00417144087 5723
Std. Residual	-1.580	3.484	.000	.989

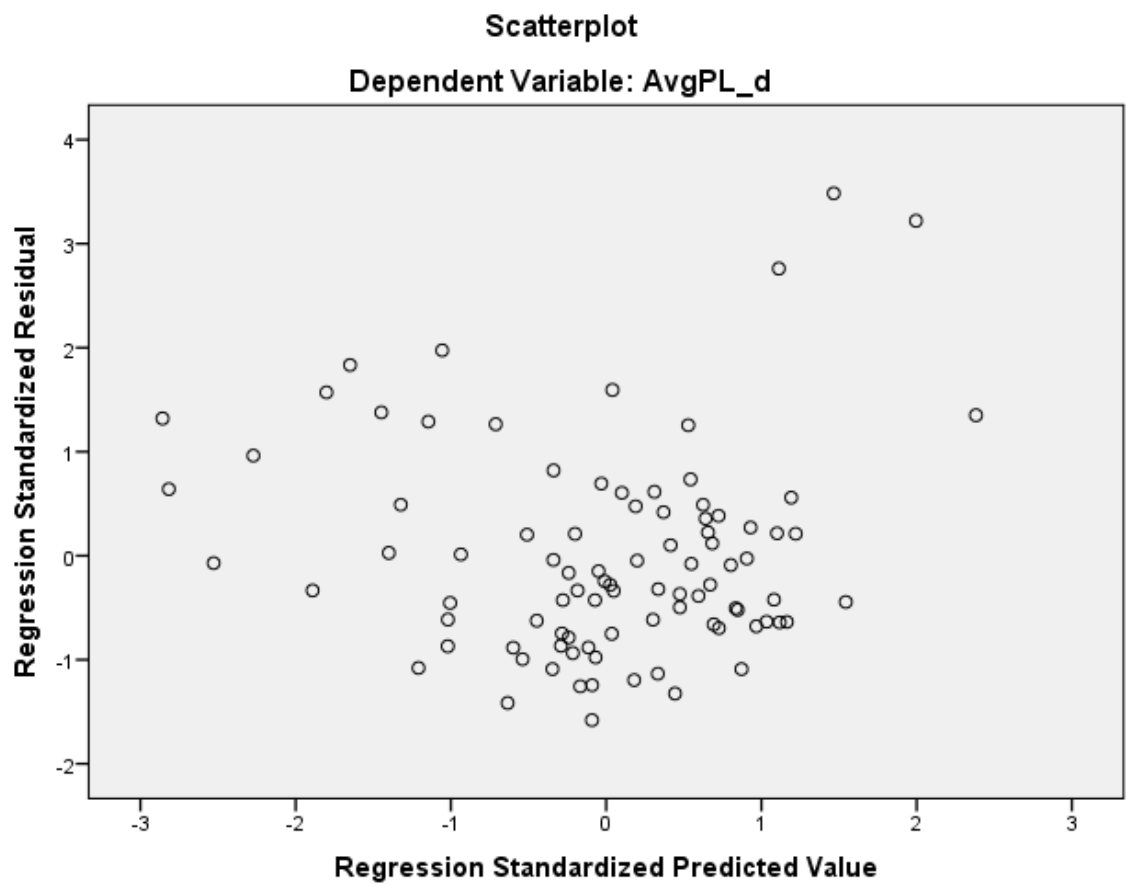
Stud. Residual	-1.589	3.551	.009	1.016
Deleted Residual	-	.01526970136	.00008266034	.00440811498
	.00674432097	9107	6369	1508
	0029			
Stud. Deleted Residual	-1.604	3.815	.017	1.041
Mahal. Distance	.006	14.294	1.978	3.125
Cook's Distance	.000	.273	.020	.051
Centered Leverage Value	.000	.159	.022	.035

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: AvgPL\_d

## Charts



REGRESSION

```

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgGL_d

/METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		29-MAY-2015 10:42:01
Comments		
Input	Active Dataset	DataSet4
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	Split File	<none>

	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgGL_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.18
	Memory Required	6080 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_5	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	R_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgGL\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.220 <sup>a</sup>	.048	.038	.00348346329 4003



2	.316 <sup>b</sup>	.100	.079	.00340737573 2662
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a. Predictors: (Constant), R\_d

b. Predictors: (Constant), R\_d, SMSP\_d

c. Dependent Variable: AvgGL\_d

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	4.510	.036 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	4.866	.010 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			

a. Dependent Variable: AvgGL\_d

b. Predictors: (Constant), R\_d

c. Predictors: (Constant), R\_d, SMSP\_d

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.044	.026		-1.697	.093
	R_d	4.979	2.344	.220	2.124	.036
2	(Constant)	-.047	.025		-1.874	.064
	R_d	5.340	2.299	.236	2.323	.022
	SMSP_d	-.033	.015	-.227	-2.240	.028

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_d	1.000	1.000
2	(Constant)		
	R_d	.995	1.005
	SMSP_d	.995	1.005

a. Dependent Variable: AvgGL\_d

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
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					Correlation	Tolerance	VIF
1	PL_TpdN	.023 <sup>b</sup>	.217	.829	.023	.963	1.038
	PL_TSpdN	-.151 <sup>b</sup>	-1.437	.154	-.151	.958	1.044
	S_d	.041 <sup>b</sup>	.352	.726	.037	.782	1.278
	SMSP_d	-.227 <sup>b</sup>	-2.240	.028	-.232	.995	1.005
2	PL_TpdN	.015 <sup>c</sup>	.149	.882	.016	.962	1.039
	PL_TSpdN	-.121 <sup>c</sup>	-1.166	.247	-.124	.940	1.064
	S_d	.038 <sup>c</sup>	.329	.743	.035	.782	1.278

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	.963
	PL_TSpdN	.958
	S_d	.782
	SMSP_d	.995
2	PL_TpdN	.958
	PL_TSpdN	.940
	S_d	.779

a. Dependent Variable: AvgGL\_d

b. Predictors in the Model: (Constant), R\_d

c. Predictors in the Model: (Constant), R\_d, SMSP\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_d	SMSP_d
1	1	2.000	1.000	.00	.00	
	2	.000	141.104	1.00	1.00	
2	1	2.273	1.000	.00	.00	.06
	2	.727	1.769	.00	.00	.93
	3	9.999E-5	150.782	1.00	1.00	.00

a. Dependent Variable: AvgGL\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00473369518 2949	.01291093975 3056	.01098901098 9011	.00112051589 4797
Std. Predicted Value	-5.583	1.715	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	.00137372326 5715	.01290987152 6062	.01093085866 6319	.00136821208 5032

Residual	- .00490655610 3379	.01410643849 5219	.00000000000 0000	.00336930330 0472
Std. Residual	-1.440	4.140	.000	.989
Stud. Residual	-1.450	4.205	.007	1.006
Deleted Residual	- .00497386651 1136	.01455262210 2201	.00005815232 2692	.00350237824 2317
Stud. Deleted Residual	-1.459	4.677	.018	1.042
Mahal. Distance	.002	55.892	1.978	6.368
Cook's Distance	.000	.513	.015	.060
Centered Leverage Value	.000	.621	.022	.071

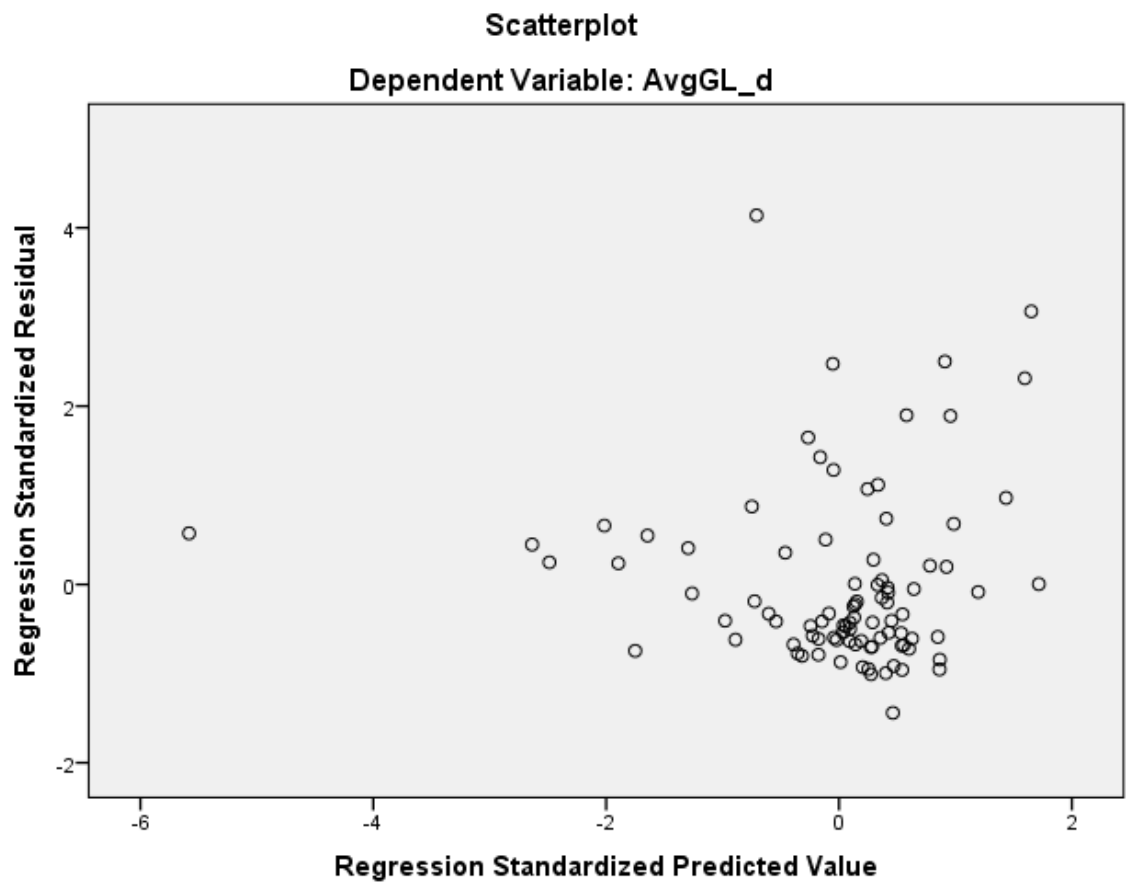
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91

Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: AvgGL\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECd

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 06:56:10
Comments	
Input	Active Dataset
	DataSet1

	Filter	<none>	
	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File		91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on cases with no missing values for any variable used.	
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT ECd  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.23
	Elapsed Time		00:00:00.27
	Memory Required	6112 bytes	



	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_6	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	R_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECd

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.225 <sup>a</sup>	.050	.040	.00408937880 7542

a. Predictors: (Constant), R\_d

b. Dependent Variable: ECd

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	4.731	.032 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			

a. Dependent Variable: ECd

b. Predictors: (Constant), R\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.077	.030		2.538	.013
	R_d	-5.986	2.752	-.225	-2.175	.032

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_d	1.000	1.000

a. Dependent Variable: ECd

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	.092 <sup>b</sup>	.876	.383	.093	.963	1.038
	PL_TSpdN	.090 <sup>b</sup>	.847	.399	.090	.958	1.044
	S_d	.160 <sup>b</sup>	1.376	.172	.145	.782	1.278
	SMSP_d	.052 <sup>b</sup>	.498	.620	.053	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpdN	.963	
	PL_TSpdN	.958	
	S_d	.782	

SMSP_d	.995
--------	------

a. Dependent Variable: ECd

b. Predictors in the Model: (Constant), R\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_d
1	1	2.000	1.000	.00	.00
	2	.000	141.104	1.00	1.00

a. Dependent Variable: ECd

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00891384761 7805	.01452563051 1343	.01098901098 9011	.00093761835 0242
Std. Predicted Value	-2.213	3.772	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00903239380 5683	.01562469732 0163	.01100951129 6205	.00098790082 0676

Residual	- .00719979126 0064	.00641833571 7171	.00000000000 0000	.00406659657 5639
Std. Residual	-1.761	1.570	.000	.994
Stud. Residual	-1.771	1.584	-.002	1.005
Deleted Residual	- .00728186452 7613	.00654017785 5641	- .00002050030 7194	.00415691223 4723
Stud. Deleted Residual	-1.792	1.598	-.001	1.009
Mahal. Distance	.000	14.227	.989	2.398
Cook's Distance	.000	.214	.011	.024
Centered Leverage Value	.000	.158	.011	.027

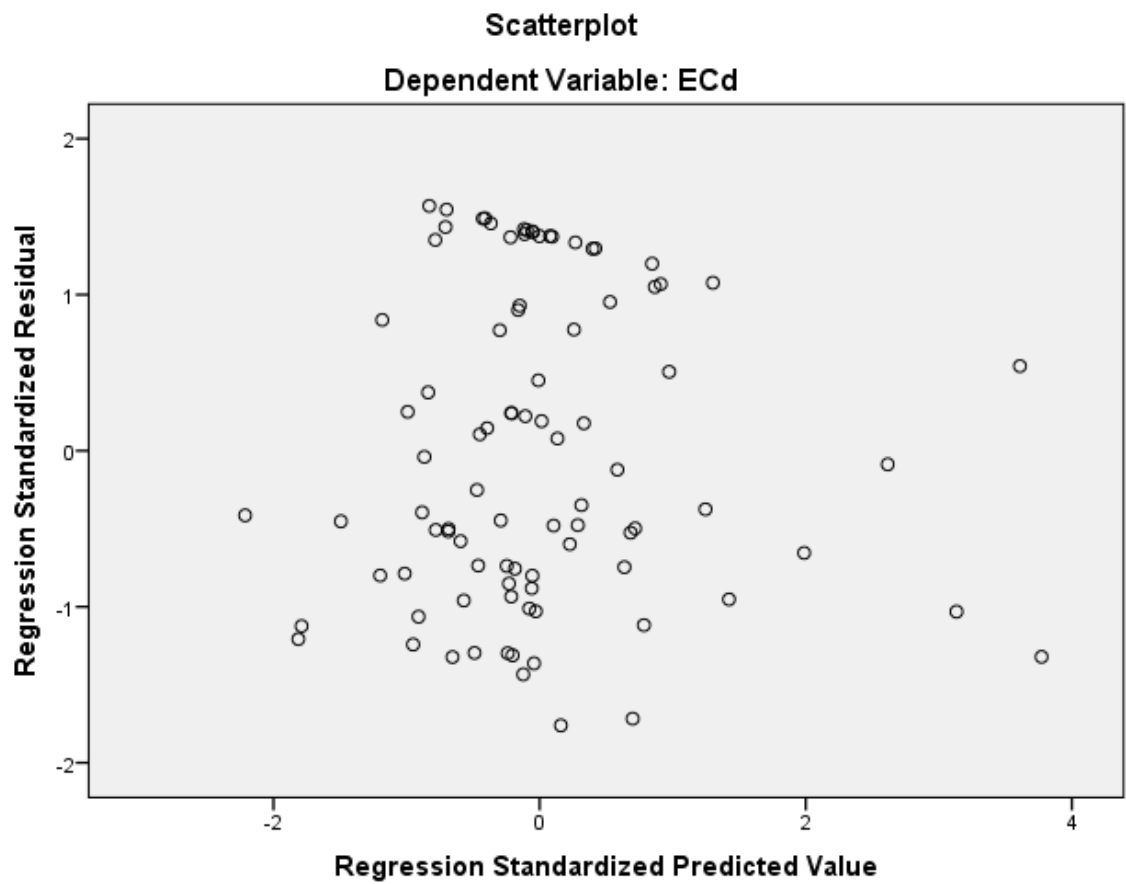
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91

Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECd

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCdN

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 06:56:40	
Comments		
Input	Active Dataset	DataSet1

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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_EVCdN
		/METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d
		/SCATTERPLOT=(*ZRESID ,*ZPRED)
Resources		/SAVE COOK.
	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.21
	Memory Required	6160 bytes



	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	PL_TpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCdN

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.389 <sup>a</sup>	.151	.142	.00377245587 9210

a. Predictors: (Constant), PL\_TpdN

b. Dependent Variable: PL\_EVCdN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	15.889	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: PL\_EVCdN

b. Predictors: (Constant), PL\_TpdN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.001		4.515	.000
	PL_TpdN	.457	.115	.389	3.986	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpdN	1.000	1.000

a. Dependent Variable: PL\_EVCdN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpdN	-.145 <sup>b</sup>	-1.480	.142	-.156	.977	1.023
	S_d	.037 <sup>b</sup>	.368	.714	.039	.963	1.038
	R_d	.094 <sup>b</sup>	.945	.347	.100	.963	1.038
	SMSP_d	.158 <sup>b</sup>	1.629	.107	.171	1.000	1.000

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TSpdN	.977	
	S_d	.963	
	R_d	.963	

SMSP_d	1.000
--------	-------

a. Dependent Variable: PL\_EVCdN

b. Predictors in the Model: (Constant), PL\_TpdN

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	PL_TpdN
1	1	1.954	1.000	.02	.02
	2	.046	6.528	.98	.98

a. Dependent Variable: PL\_EVCdN

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00929175410 4197	.01666060835 1231	.01098901098 9011	.00158507051 2618
Std. Predicted Value	-1.071	3.578	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00906100217 2530	.01627309247 8514	.01096513832 8180	.00152287197 7279

Residual	- .00548312161 1178	.01946360804 1406	.00000000000 0000	.00375143924 8390
Std. Residual	-1.453	5.159	.000	.994
Stud. Residual	-1.507	5.404	.003	1.021
Deleted Residual	- .00589375570 4165	.02135029993 9513	.00002387266 0831	.00396266908 6057
Stud. Deleted Residual	-1.518	6.555	.023	1.116
Mahal. Distance	.000	12.803	.989	2.160
Cook's Distance	.000	1.415	.030	.161
Centered Leverage Value	.000	.142	.011	.024

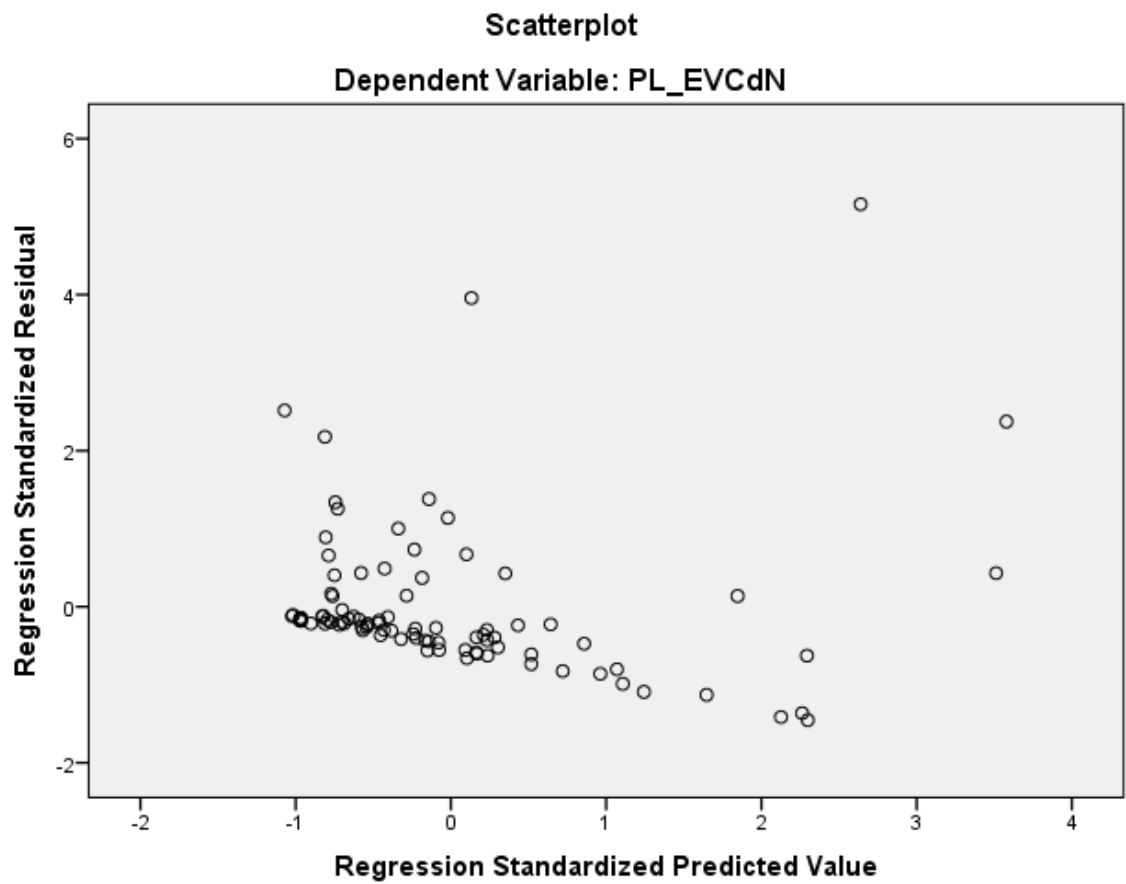
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91

Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCdN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCd\_TpdN

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 06:56:58	
Comments		
Input	Active Dataset	DataSet1

		Filter	<none>
		Weight	<none>
		Split File	<none>
		N of Rows in Working Data File	91
	Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
		Cases Used	Statistics are based on cases with no missing values for any variable used.
	Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCd_TpdN  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
	Resources	Processor Time	00:00:00.02
		Elapsed Time	00:00:00.02
		Memory Required	6192 bytes



	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_8	Cook's Distance

### Warnings

No variables were entered into the equation.

### REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCd\_TSpdN

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

### Regression

## Notes

Output Created		31-MAY-2015 06:57:08
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCd_TSpdN  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.20
	Elapsed Time		00:00:00.25
	Memory Required	6240 bytes	
	Additional Memory Required for Residual Plots	0 bytes	
Variables Created or Modified	COO_9	Cook's Distance	

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	PL_TSpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	----------	--	--

a. Dependent Variable: EVCd\_TSpdN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.267 <sup>a</sup>	.071	.061	.01643341786 4161

a. Predictors: (Constant), PL\_TSpdN

b. Dependent Variable: EVCd\_TSpdN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	6.845	.010 <sup>b</sup>
	Residual	.024	89	.000		

Total	.026	90			
-------	------	----	--	--	--

a. Dependent Variable: EVCd\_TSpdN

b. Predictors: (Constant), PL\_TSpdN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.029	.007		4.057	.000
	PL_TSpdN	-1.677	.641	-.267	-2.616	.010

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TSpdN	1.000	1.000

a. Dependent Variable: EVCd\_TSpdN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	.140 <sup>b</sup>	1.364	.176	.144	.977	1.023
	S_d	-.065 <sup>b</sup>	-.630	.530	-.067	.992	1.008
	R_d	-.032 <sup>b</sup>	-.302	.764	-.032	.958	1.044
	SMSP_d	-.145 <sup>b</sup>	-1.413	.161	-.149	.978	1.023

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpdN	.977	
	S_d	.992	
	R_d	.958	
	SMSP_d	.978	

a. Dependent Variable: EVCd\_TSpdN

b. Predictors in the Model: (Constant), PL\_TSpdN

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	PL_TSpdN

1	1	1.971	1.000	.01	.01
	2	.029	8.300	.99	.99

a. Dependent Variable: EVCd\_TSpdN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00743280211 4636	.01597926951 9448	.01098901098 9011	.00453217459 9353
Std. Predicted Value	-4.065	1.101	.000	1.000
Standard Error of Predicted Value	.002	.007	.002	.001
Adjusted Predicted Value	- .00922827422 6189	.01637991704 0467	.01095185735 7003	.00464889038 6065
Residual	- .01597926951 9448	.04524136334 6577	.00000000000 0000	.01634186607 7360
Std. Residual	-.972	2.753	.000	.994
Stud. Residual	-.984	2.776	.001	1.003
Deleted Residual	- .01637991704 0467	.04600794985 8904	.00003715363 2008	.01663113342 5545
Stud. Deleted Residual	-.984	2.889	.007	1.012
Mahal. Distance	.000	16.522	.989	2.410

Cook's Distance	.000	.065	.009	.012
Centered Leverage Value	.000	.184	.011	.027

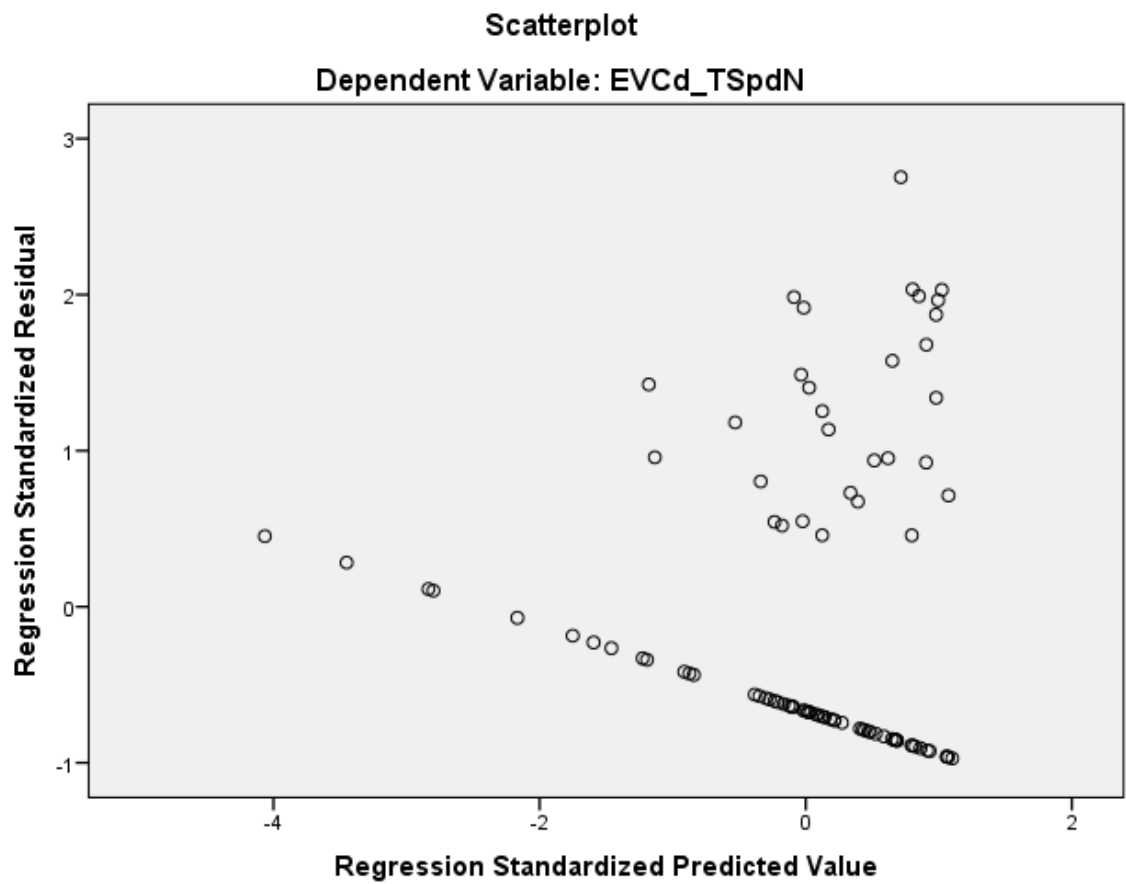
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCd\_TSpdN

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCdN

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 06:57:43
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_EVCdN
		/METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d
		/SCATTERPLOT=(*ZRESID ,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Memory Required	6272 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_10	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	PL_TpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	PL_TSpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCdN

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.287 <sup>a</sup>	.082	.072	.00310981369 2072
2	.354 <sup>b</sup>	.125	.105	.00305363916 3916
3	.411 <sup>c</sup>	.169	.140	.00299377387 7148

a. Predictors: (Constant), PL\_TpdN

b. Predictors: (Constant), PL\_TpdN, SMSP\_d

c. Predictors: (Constant), PL\_TpdN, SMSP\_d, PL\_TSpdN

d. Dependent Variable: PL\_EVCdN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	7.890	.006 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.001	89			
2	Regression	.000	2	.000	6.225	.003 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.001	89			
3	Regression	.000	3	.000	5.822	.001 <sup>d</sup>
	Residual	.001	86	.000		

Total	.001	89			
-------	------	----	--	--	--

a. Dependent Variable: PL\_EVCdN

b. Predictors: (Constant), PL\_TpdN

c. Predictors: (Constant), PL\_TpdN, SMSP\_d

d. Predictors: (Constant), PL\_TpdN, SMSP\_d, PL\_TSpdN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.008	.001		6.880	.000
	PL_TpdN	.277	.098	.287	2.809	.006
2	(Constant)	.007	.001		6.629	.000
	PL_TpdN	.280	.097	.290	2.891	.005
	SMSP_d	.028	.013	.207	2.066	.042
3	(Constant)	.010	.002		6.223	.000
	PL_TpdN	.311	.096	.322	3.238	.002
	SMSP_d	.032	.013	.240	2.407	.018
	PL_TSpdN	-.254	.120	-.214	-2.125	.036

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpdN	1.000	1.000
2	(Constant)		
	PL_TpdN	1.000	1.000
	SMSP_d	1.000	1.000
3	(Constant)		
	PL_TpdN	.977	1.024
	SMSP_d	.976	1.024
	PL_TSpdN	.955	1.047

a. Dependent Variable: PL\_EVCdN

#### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpdN	-.177 <sup>b</sup>	-1.730	.087	-.182	.978	1.022
	S_d	.022 <sup>b</sup>	.209	.835	.022	.969	1.032
	R_d	.144 <sup>b</sup>	1.390	.168	.147	.963	1.039
	SMSP_d	.207 <sup>b</sup>	2.066	.042	.216	1.000	1.000

2	PL_TSpdN	-.214 <sup>c</sup>	-2.125	.036	-.223	.955	1.047
	S_d	.017 <sup>c</sup>	.161	.872	.017	.969	1.032
	R_d	.129 <sup>c</sup>	1.261	.211	.135	.957	1.045
3	S_d	.029 <sup>d</sup>	.293	.770	.032	.965	1.036
	R_d	.170 <sup>d</sup>	1.689	.095	.180	.929	1.076

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpdN	.978
	S_d	.969
	R_d	.963
	SMSP_d	1.000
2	PL_TSpdN	.955
	S_d	.969
	R_d	.957
3	S_d	.950
	R_d	.927

a. Dependent Variable: PL\_EVCdN

b. Predictors in the Model: (Constant), PL\_TpdN

c. Predictors in the Model: (Constant), PL\_TpdN, SMSP\_d

d. Predictors in the Model: (Constant), PL\_TpdN, SMSP\_d, PL\_TSpdN



### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpdN	SMSP_d
1	1	1.956	1.000	.02	.02	
	2	.044	6.692	.98	.98	
2	1	2.224	1.000	.02	.02	.07
	2	.732	1.743	.01	.01	.93
	3	.043	7.161	.98	.97	.01
3	1	3.152	1.000	.00	.01	.03
	2	.760	2.036	.00	.00	.95
	3	.062	7.126	.03	.82	.02
	4	.026	11.037	.97	.17	.00

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		PL_TSpdN
1	1	
	2	
2	1	
	2	

	3	
3	1	.01
	2	.00
	3	.30
	4	.69

a. Dependent Variable: PL\_EVCdN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00652098562 5684	.01573615148 6635	.01072627148 1892	.00132628531 8419
Std. Predicted Value	-3.171	3.777	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00576718850 0613	.01534081716 0904	.01068765243 1744	.00128999556 1340
Residual	- .00360950338 6542	.01485828496 5158	.00000000000 0000	.00294288449 4872
Std. Residual	-1.206	4.963	.000	.983
Stud. Residual	-1.255	5.002	.006	1.014
Deleted Residual	- .00391175039 1126	.01509485393 7626	.00003861905 0148	.00313881463 6411

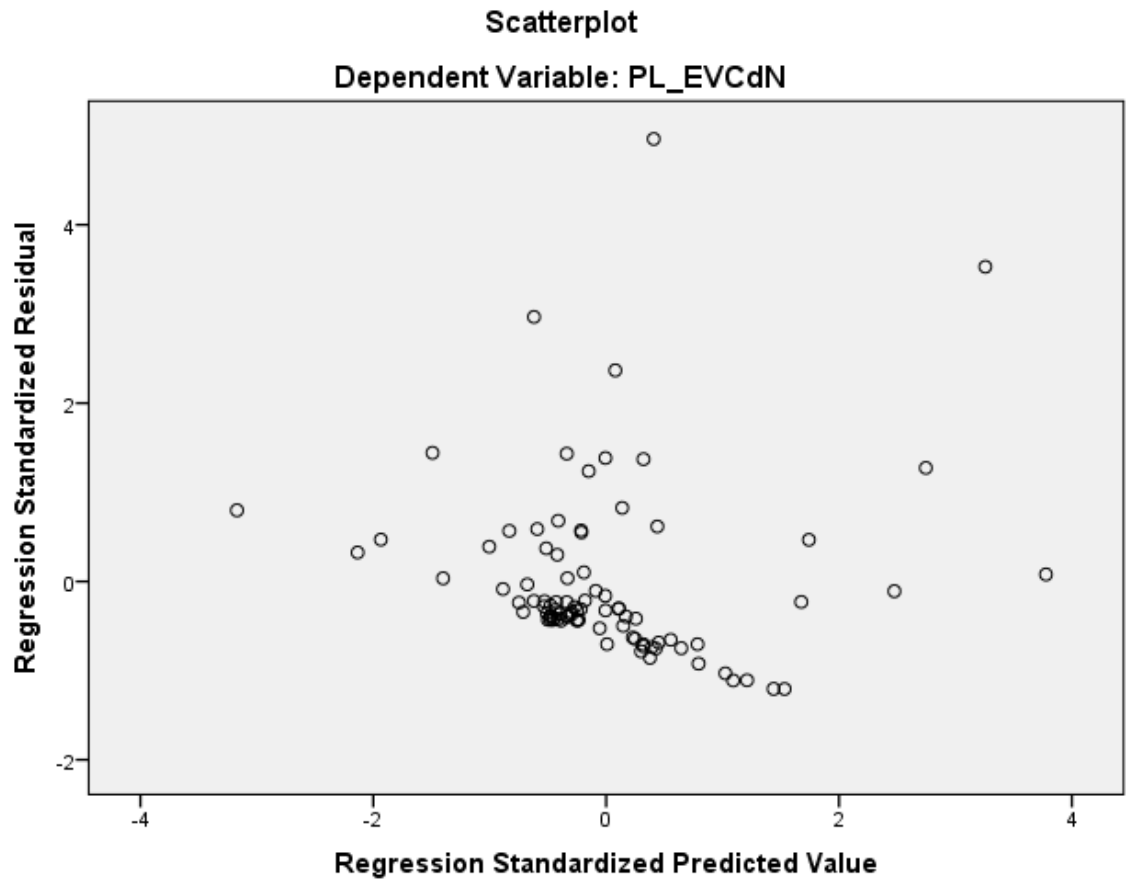
Stud. Deleted Residual	-1.259	5.906	.024	1.090
Mahal. Distance	.024	54.636	2.967	6.734
Cook's Distance	.000	.905	.018	.096
Centered Leverage Value	.000	.614	.033	.076

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: PL\_EVCdN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECont

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpaths\_d  
AvgPL\_d AvgGL\_d PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:50:04	
Comments			
Input	Active Dataset	DataSet10	
	Filter	<none>	
	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File	91	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	

Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.
		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT Ecout  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Memory Required	17200 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_1	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Reciprocity		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	Edges_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECont

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.549 <sup>a</sup>	.301	.293	.00265842674 7544
2	.617 <sup>b</sup>	.381	.367	.00251626625 0748

a. Predictors: (Constant), Reciprocity

b. Predictors: (Constant), Reciprocity, Edges\_d

c. Dependent Variable: ECont

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	38.360	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	27.078	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			

a. Dependent Variable: ECont

b. Predictors: (Constant), Reciprocity

c. Predictors: (Constant), Reciprocity, Edges\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------



		B	Std. Error	Beta		
1	(Constant)	.012	.000		37.842	.000
	Reciprocity	-.082	.013	-.549	-6.194	.000
2	(Constant)	.014	.001		19.842	.000
	Reciprocity	-.086	.013	-.575	-6.824	.000
	Edges_d	-.193	.057	-.284	-3.368	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.992	1.008
	Edges_d	.992	1.008

a. Dependent Variable: Ecout

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	-.263 <sup>b</sup>	-3.091	.003	-.313	.988	1.012

	Edges_d	-.284 <sup>b</sup>	-3.368	.001	-.338	.992	1.008
	Den_d	.164 <sup>b</sup>	1.837	.070	.192	.956	1.046
	CC_d	.102 <sup>b</sup>	1.052	.296	.111	.827	1.209
	GD_d	-.085 <sup>b</sup>	-.927	.357	-.098	.931	1.074
	Tpaths_d	-.256 <sup>b</sup>	-3.019	.003	-.306	.999	1.001
	TSpaths_d	-.255 <sup>b</sup>	-3.000	.004	-.305	.999	1.001
	AvgPL_d	-.146 <sup>b</sup>	-1.605	.112	-.169	.938	1.066
	AvgGL_d	-.117 <sup>b</sup>	-1.304	.196	-.138	.974	1.026
	PL_TpoutN	-.103 <sup>b</sup>	-1.164	.248	-.123	.991	1.009
	PL_TSpoutN	-.090 <sup>b</sup>	-1.017	.312	-.108	1.000	1.000
	S_pro	.076 <sup>b</sup>	.846	.400	.090	.989	1.011
	R_pro	-.012 <sup>b</sup>	-.126	.900	-.013	.952	1.051
	SMSP_d	.101 <sup>b</sup>	1.038	.302	.110	.824	1.213
	2						
	Nodes	.965 <sup>c</sup>	1.587	.116	.168	.019	53.438
	Den_d	-.269 <sup>c</sup>	-1.713	.090	-.181	.280	3.573
	CC_d	.108 <sup>c</sup>	1.176	.243	.125	.827	1.209
	GD_d	-.083 <sup>c</sup>	-.959	.340	-.102	.931	1.074
	Tpaths_d	-.070 <sup>c</sup>	-.461	.646	-.049	.311	3.220
	TSpaths_d	-.054 <sup>c</sup>	-.341	.734	-.037	.282	3.552
	AvgPL_d	-.081 <sup>c</sup>	-.908	.366	-.097	.885	1.129
	AvgGL_d	-.080 <sup>c</sup>	-.937	.351	-.100	.957	1.044
	PL_TpoutN	-.119 <sup>c</sup>	-1.423	.158	-.151	.988	1.012

PL_TSpoutN	-.070 <sup>c</sup>	-.831	.408	-.089	.995	1.005
S_pro	.044 <sup>c</sup>	.514	.609	.055	.976	1.024
R_pro	-.061 <sup>c</sup>	-.702	.485	-.075	.926	1.080
SMSP_d	.108 <sup>c</sup>	1.166	.247	.124	.824	1.214

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.988
	Edges_d	.992
	Den_d	.956
	CC_d	.827
	GD_d	.931
	Tpaths_d	.999
	TSpaths_d	.999
	AvgPL_d	.938
	AvgGL_d	.974
	PL_TpoutN	.991
	PL_TSpoutN	1.000
	S_pro	.989
	R_pro	.952
	SMSP_d	.824

2	Nodes	.019
	Den_d	.280
	CC_d	.821
	GD_d	.924
	Tpaths_d	.308
	TSpaths_d	.279
	AvgPL_d	.885
	AvgGL_d	.957
	PL_TpoutN	.984
	PL_TSpoutN	.986
	S_pro	.976
	R_pro	.926
	SMSP_d	.817

a. Dependent Variable: ECont

b. Predictors in the Model: (Constant), Reciprocity

c. Predictors in the Model: (Constant), Reciprocity, Edges\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Reciprocity	Edges_d

1	1	1.461	1.000	.27	.27	
	2	.539	1.647	.73	.73	
2	1	2.222	1.000	.03	.07	.03
	2	.703	1.777	.01	.89	.03
	3	.075	5.442	.96	.04	.95

a. Dependent Variable: ECont

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00479779439 0470	.01306384801 8646	.01098901098 9011	.00195191881 8109
Std. Predicted Value	-3.172	1.063	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00421053078 0256	.01318054832 5181	.01099262997 6785	.00196483535 8014
Residual	- .00801924709 2307	.00524164689 7048	.00000000000 0000	.00248815066 1590
Std. Residual	-3.187	2.083	.000	.989
Stud. Residual	-3.212	2.403	.000	1.024
Deleted Residual	- .00814744736 9993	.00697682984 1733	- .00000361898 7774	.00268804149 2165

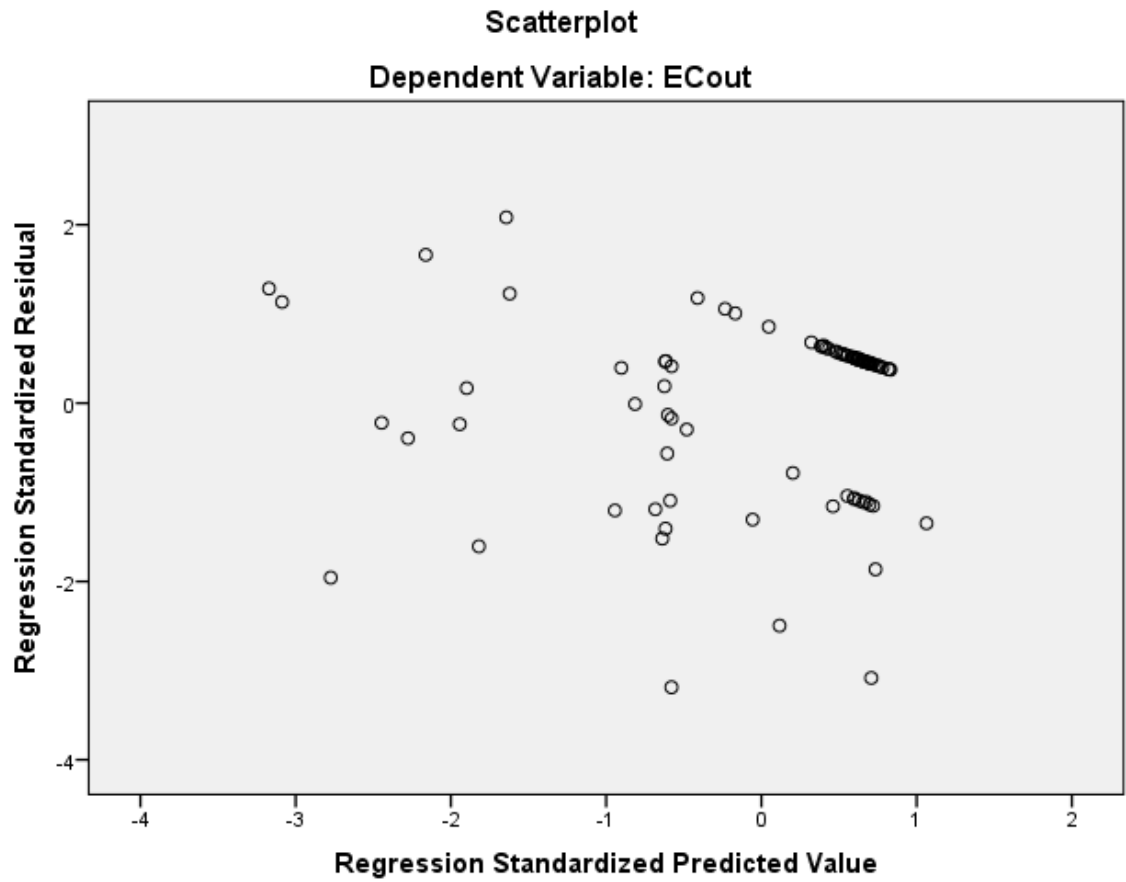
Stud. Deleted Residual	-3.400	2.472	-.007	1.044
Mahal. Distance	.268	33.422	1.978	4.549
Cook's Distance	.000	1.280	.031	.149
Centered Leverage Value	.003	.371	.022	.051

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECont

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCoutN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpaths\_d  
AvgPL\_d AvgGL\_d PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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		User-defined missing values are treated as missing.



Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.
		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_EVCoutN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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Variables Created or Modified	COO_2	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Reciprocity		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	CC_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCoutN

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.623 <sup>a</sup>	.388	.381	.01204217636 3766
2	.691 <sup>b</sup>	.477	.465	.01119441136 6519
3	.710 <sup>c</sup>	.504	.487	.01096840443 2289

a. Predictors: (Constant), Reciprocity

b. Predictors: (Constant), Reciprocity, TSpats\_d

c. Predictors: (Constant), Reciprocity, TSpats\_d, CC\_d

d. Dependent Variable: PL\_EVCoutN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.008	1	.008	56.506	.000 <sup>b</sup>
	Residual	.013	89	.000		
	Total	.021	90			
2	Regression	.010	2	.005	40.190	.000 <sup>c</sup>
	Residual	.011	88	.000		
	Total	.021	90			
3	Regression	.011	3	.004	29.463	.000 <sup>d</sup>

Residual	.010	87	.000		
Total	.021	90			

a. Dependent Variable: PL\_EVCoutN

b. Predictors: (Constant), Reciprocity

c. Predictors: (Constant), Reciprocity, TSpaths\_d

d. Predictors: (Constant), Reciprocity, TSpaths\_d, CC\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.001		4.255	.000
	Reciprocity	.449	.060	.623	7.517	.000
2	(Constant)	-.064	.018		-3.530	.001
	Reciprocity	.455	.056	.632	8.198	.000
	TSpaths_d	6.405	1.654	.299	3.872	.000
3	(Constant)	-.065	.018		-3.625	.000
	Reciprocity	.509	.060	.707	8.508	.000
	TSpaths_d	6.420	1.621	.299	3.961	.000
	CC_d	-.031	.015	-.179	-2.160	.034

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.999	1.001
	TSpaths_d	.999	1.001
3	(Constant)		
	Reciprocity	.827	1.210
	TSpaths_d	.999	1.001
	CC_d	.827	1.209

a. Dependent Variable: PL\_EVCoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	.254 <sup>b</sup>	3.201	.002	.323	.988	1.012	.988
	Edges_d	.281 <sup>b</sup>	3.591	.001	.357	.992	1.008	.992
	Den_d	-.192 <sup>b</sup>	-2.325	.022	-.241	.956	1.046	.956

	CC_d	-.178 <sup>b</sup>	-1.983	.050	-.207	.827	1.209	.827
	GD_d	.195 <sup>b</sup>	2.331	.022	.241	.931	1.074	.931
	Tpaths_d	.296 <sup>b</sup>	3.828	.000	.378	.999	1.001	.999
	TSpaths_d	.299 <sup>b</sup>	3.872	.000	.382	.999	1.001	.999
	AvgPL_d	.168 <sup>b</sup>	1.998	.049	.208	.938	1.066	.938
	AvgGL_d	.180 <sup>b</sup>	2.182	.032	.227	.974	1.026	.974
	PL_TpoutN	-.032 <sup>b</sup>	-.388	.699	-.041	.991	1.009	.991
	PL_TSpout N	.016 <sup>b</sup>	.191	.849	.020	1.000	1.000	1.000
	S_pro	.008 <sup>b</sup>	.098	.922	.010	.989	1.011	.989
	R_pro	.079 <sup>b</sup>	.928	.356	.098	.952	1.051	.952
	SMSP_d	-.177 <sup>b</sup>	-1.971	.052	-.206	.824	1.213	.824
2	Nodes	.017 <sup>c</sup>	.120	.905	.013	.309	3.237	.309
	Edges_d	.095 <sup>c</sup>	.651	.517	.070	.279	3.578	.279
	Den_d	.176 <sup>c</sup>	1.283	.203	.136	.314	3.187	.314
	CC_d	-.179 <sup>c</sup>	-2.160	.034	-.226	.827	1.209	.827
	GD_d	.114 <sup>c</sup>	1.369	.175	.145	.849	1.177	.849
	Tpaths_d	.027 <sup>c</sup>	.054	.957	.006	.023	42.917	.023
	AvgPL_d	-.032 <sup>c</sup>	-.315	.754	-.034	.588	1.700	.588
	AvgGL_d	.004 <sup>c</sup>	.039	.969	.004	.640	1.563	.640
	PL_TpoutN	-.044 <sup>c</sup>	-.569	.571	-.061	.990	1.010	.990
	PL_TSpout N	-.048 <sup>c</sup>	-.607	.545	-.065	.957	1.045	.956

	S_pro	-.060 <sup>c</sup>	-.752	.454	-.080	.942	1.061	.942
	R_pro	.016 <sup>c</sup>	.198	.844	.021	.911	1.098	.911
	SMSP_d	-.180 <sup>c</sup>	-2.159	.034	-.225	.824	1.213	.823
3	Nodes	.020 <sup>d</sup>	.148	.883	.016	.309	3.238	.309
	Edges_d	.104 <sup>d</sup>	.725	.471	.078	.279	3.581	.279
	Den_d	.171 <sup>d</sup>	1.276	.205	.136	.314	3.188	.314
	GD_d	.126 <sup>d</sup>	1.544	.126	.164	.846	1.182	.781
	Tpaths_d	.137 <sup>d</sup>	.275	.784	.030	.023	43.364	.023
	AvgPL_d	-.026 <sup>d</sup>	-.266	.791	-.029	.588	1.702	.588
	AvgGL_d	-.010 <sup>d</sup>	-.109	.913	-.012	.637	1.570	.637
	PL_TpoutN	-.046 <sup>d</sup>	-.607	.545	-.065	.990	1.010	.820
	PL_TSpout N	-.034 <sup>d</sup>	-.432	.667	-.047	.950	1.053	.821
	S_pro	-.067 <sup>d</sup>	-.854	.395	-.092	.941	1.063	.815
	R_pro	.012 <sup>d</sup>	.150	.881	.016	.910	1.099	.787
	SMSP_d	.002 <sup>d</sup>	.001	1.000	.000	.000	2013.176	.000

a. Dependent Variable: PL\_EVCoutN

b. Predictors in the Model: (Constant), Reciprocity

c. Predictors in the Model: (Constant), Reciprocity, TSpats\_d

d. Predictors in the Model: (Constant), Reciprocity, TSpats\_d, CC\_d

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Reciprocity	TSpaths_d
1	1	1.461	1.000	.27	.27	
	2	.539	1.647	.73	.73	
2	1	2.319	1.000	.00	.07	.00
	2	.679	1.848	.00	.93	.00
	3	.002	33.433	1.00	.00	1.00
3	1	2.407	1.000	.00	.06	.00
	2	1.111	1.472	.00	.09	.00
	3	.479	2.241	.00	.85	.00
	4	.002	34.064	1.00	.00	1.00

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		CC_d
1	1	
	2	
2	1	
	2	
	3	
3	1	.02
	2	.47



3	.51
4	.00

a. Dependent Variable: PL\_EVCoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00386269949 3766	.04829414561 3909	.01098901098 9011	.01086985910 8302
Std. Predicted Value	-1.366	3.432	.000	1.000
Standard Error of Predicted Value	.001	.011	.002	.001
Adjusted Predicted Value	- .00412525376 3050	.05326795205 4739	.01098732105 0179	.01096870789 1105
Residual	- .02516536414 6233	.02967634052 0382	.00000000000 0000	.01078404837 0808
Std. Residual	-2.294	2.706	.000	.983
Stud. Residual	-2.347	2.730	.000	1.013
Deleted Residual	- .02632495574 6531	.03399116173 3866	.00000168993 8832	.01148191408 2085
Stud. Deleted Residual	-2.411	2.838	.005	1.028
Mahal. Distance	.279	84.910	2.967	9.303

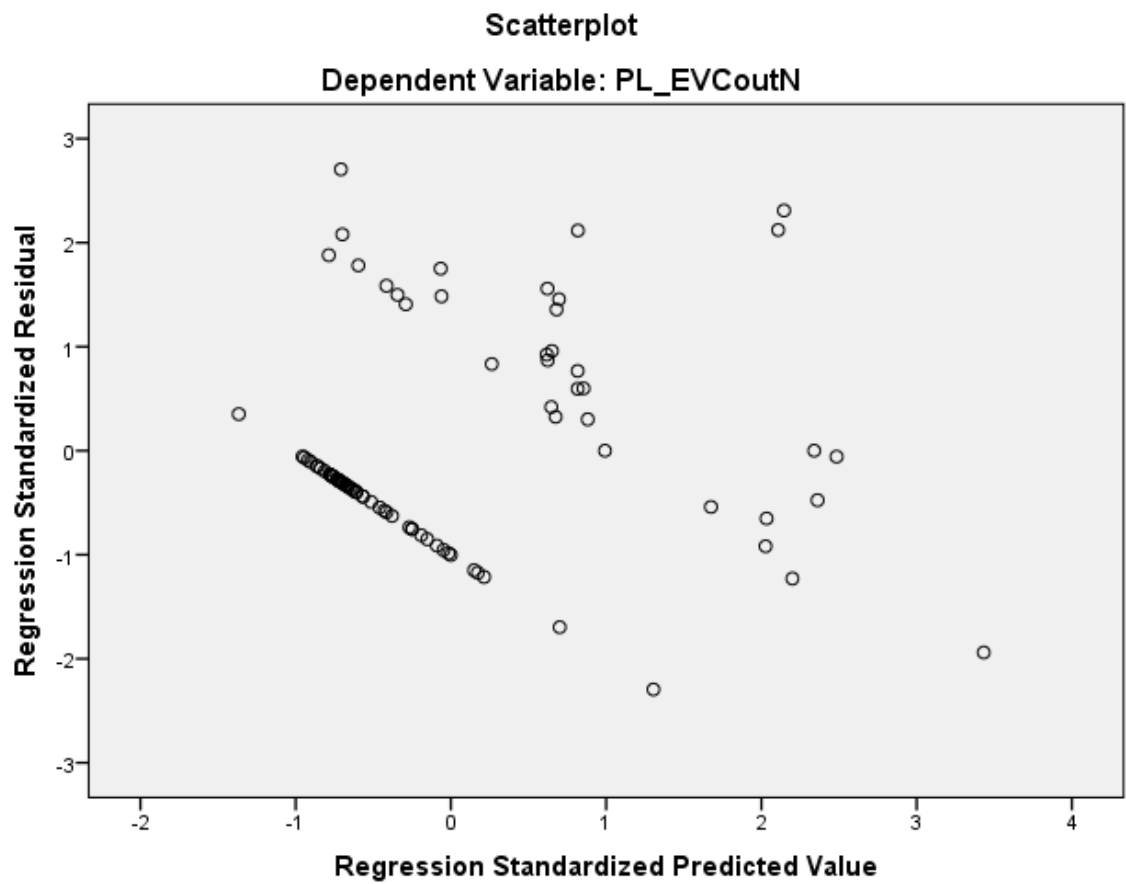
Cook's Distance	.000	.612	.017	.071
Centered Leverage Value	.003	.943	.033	.103

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCoutN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCout\_TpoutN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpaths\_d  
AvgPL\_d AvgGL\_d PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCut_TpoutN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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Variables Created or Modified	COO_3	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Nodes		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4		Nodes	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCout\_TpoutN

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.306 <sup>a</sup>	.094	.084	.02544544530 3134
2	.387 <sup>b</sup>	.150	.131	.02478564980 4432
3	.449 <sup>c</sup>	.201	.174	.02416152432 0194
4	.441 <sup>d</sup>	.195	.176	.02412297807 4990

a. Predictors: (Constant), Nodes

b. Predictors: (Constant), Nodes, R\_pro

c. Predictors: (Constant), Nodes, R\_pro, Tpaths\_d

d. Predictors: (Constant), R\_pro, Tpaths\_d

e. Dependent Variable: EVCout\_TpoutN

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.006	1	.006	9.220	.003 <sup>b</sup>
	Residual	.058	89	.001		
	Total	.064	90			
2	Regression	.010	2	.005	7.759	.001 <sup>c</sup>
	Residual	.054	88	.001		
	Total	.064	90			
3	Regression	.013	3	.004	7.312	.000 <sup>d</sup>
	Residual	.051	87	.001		
	Total	.064	90			
4	Regression	.012	2	.006	10.642	.000 <sup>e</sup>
	Residual	.051	88	.001		
	Total	.064	90			

a. Dependent Variable: EVCout\_TpoutN

b. Predictors: (Constant), Nodes

c. Predictors: (Constant), Nodes, R\_pro

d. Predictors: (Constant), Nodes, R\_pro, Tpaths\_d

e. Predictors: (Constant), R\_pro, Tpaths\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------



		B	Std. Error	Beta		
1	(Constant)	-.008	.007		-1.186	.239
	Nodes	1.737	.572	.306	3.036	.003
2	(Constant)	.034	.019		1.816	.073
	Nodes	1.464	.569	.258	2.574	.012
	R_pro	-3.545	1.472	-.242	-2.409	.018
3	(Constant)	-.094	.057		-1.647	.103
	Nodes	-1.000	1.179	-.176	-.848	.399
	R_pro	-6.342	1.859	-.432	-3.412	.001
	Tpaths_d	16.859	7.121	.494	2.367	.020
4	(Constant)	-.057	.037		-1.545	.126
	R_pro	-5.344	1.436	-.364	-3.722	.000
	Tpaths_d	11.528	3.342	.338	3.449	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Nodes	1.000	1.000
2	(Constant)		
	Nodes	.960	1.041
	R_pro	.960	1.041
3	(Constant)		

4	Nodes	.212	4.713
	R_pro	.572	1.748
	Tpaths_d	.211	4.736
	(Constant)		
	R_pro	.956	1.046
	Tpaths_d	.956	1.046

a. Dependent Variable: EVCout\_TpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Edges_d	-1.004 <sup>b</sup>	-1.383	.170	-.146	.019	52.286	.019
	Reciprocity	-.059 <sup>b</sup>	-.575	.567	-.061	.988	1.012	.988
	Den_d	-.039 <sup>b</sup>	-.205	.838	-.022	.280	3.576	.280
	CC_d	-.041 <sup>b</sup>	-.407	.685	-.043	.999	1.001	.999
	GD_d	-.062 <sup>b</sup>	-.613	.541	-.065	.999	1.001	.999
	Tpaths_d	.041 <sup>b</sup>	.243	.809	.026	.354	2.822	.354
	TSpaths_d	.018 <sup>b</sup>	.102	.919	.011	.316	3.161	.316
	AvgPL_d	.041 <sup>b</sup>	.396	.693	.042	.960	1.042	.960
	AvgGL_d	.008 <sup>b</sup>	.080	.936	.009	.988	1.012	.988

	PL_TpoutN	-.053 <sup>b</sup>	-.521	.604	-.055	.996	1.005	.996
	PL_TSpout N	-.146 <sup>b</sup>	-1.456	.149	-.153	.997	1.003	.997
	S_pro	-.078 <sup>b</sup>	-.767	.445	-.082	.982	1.018	.982
	R_pro	-.242 <sup>b</sup>	-2.409	.018	-.249	.960	1.041	.960
	SMSP_d	-.042 <sup>b</sup>	-.418	.677	-.044	.999	1.001	.999
2	Edges_d	-.815 <sup>c</sup>	-1.140	.257	-.121	.019	53.015	.019
	Reciprocity	-.011 <sup>c</sup>	-.106	.916	-.011	.947	1.056	.921
	Den_d	-.114 <sup>c</sup>	-.606	.546	-.065	.272	3.672	.263
	CC_d	-.026 <sup>c</sup>	-.263	.794	-.028	.994	1.006	.956
	GD_d	.074 <sup>c</sup>	.648	.519	.069	.753	1.329	.723
	Tpaths_d	.494 <sup>c</sup>	2.367	.020	.246	.211	4.736	.211
	TSpaths_d	.516 <sup>c</sup>	2.282	.025	.238	.180	5.541	.180
	AvgPL_d	.258 <sup>c</sup>	2.171	.033	.227	.658	1.521	.658
	AvgGL_d	.287 <sup>c</sup>	2.243	.027	.234	.565	1.770	.549
	PL_TpoutN	.042 <sup>c</sup>	.389	.698	.042	.857	1.167	.826
	PL_TSpout N	-.031 <sup>c</sup>	-.270	.788	-.029	.727	1.376	.700
	S_pro	.118 <sup>c</sup>	.925	.358	.099	.596	1.678	.583
	SMSP_d	-.027 <sup>c</sup>	-.270	.787	-.029	.994	1.006	.956
3	Edges_d	-1.574 <sup>d</sup>	-2.161	.033	-.227	.017	60.217	.017
	Reciprocity	-.033 <sup>d</sup>	-.327	.744	-.035	.939	1.065	.209
	Den_d	-.027 <sup>d</sup>	-.141	.888	-.015	.261	3.832	.157
	CC_d	-.044 <sup>d</sup>	-.450	.654	-.048	.989	1.011	.210

	GD_d	-.065 <sup>d</sup>	-.513	.609	-.055	.584	1.713	.164
	TSpats_d	.128 <sup>d</sup>	.199	.843	.021	.022	44.742	.022
	AvgPL_d	.088 <sup>d</sup>	.425	.672	.046	.218	4.589	.070
	AvgGL_d	.134 <sup>d</sup>	.675	.502	.073	.233	4.296	.087
	PL_TpoutN	.068 <sup>d</sup>	.649	.518	.070	.847	1.180	.209
	PL_TSpout N	-.006 <sup>d</sup>	-.054	.957	-.006	.720	1.388	.206
	S_pro	.057 <sup>d</sup>	.449	.654	.048	.569	1.759	.201
	SMSP_d	-.045 <sup>d</sup>	-.462	.645	-.050	.988	1.012	.210
4	Edges_d	-.316 <sup>e</sup>	-1.448	.151	-.153	.190	5.277	.187
	Reciprocity	-.023 <sup>e</sup>	-.229	.819	-.025	.952	1.051	.910
	Den_d	.050 <sup>e</sup>	.311	.756	.033	.354	2.827	.341
	CC_d	-.037 <sup>e</sup>	-.383	.702	-.041	.995	1.005	.951
	GD_d	-.016 <sup>e</sup>	-.136	.892	-.015	.693	1.443	.693
	TSpats_d	-.089 <sup>e</sup>	-.151	.880	-.016	.027	37.732	.026
	AvgPL_d	.133 <sup>e</sup>	.894	.374	.095	.413	2.423	.413
	AvgGL_d	.163 <sup>e</sup>	1.064	.290	.113	.390	2.563	.390
	PL_TpoutN	.059 <sup>e</sup>	.565	.573	.060	.855	1.169	.819
	PL_TSpout N	-.022 <sup>e</sup>	-.195	.846	-.021	.741	1.349	.739
	S_pro	.076 <sup>e</sup>	.606	.546	.065	.591	1.693	.589
	SMSP_d	-.038 <sup>e</sup>	-.394	.694	-.042	.995	1.006	.951
	Nodes	-.176 <sup>e</sup>	-.848	.399	-.091	.212	4.713	.211

a. Dependent Variable: EVCout\_TpoutN

b. Predictors in the Model: (Constant), Nodes

c. Predictors in the Model: (Constant), Nodes, R\_pro

d. Predictors in the Model: (Constant), Nodes, R\_pro, Tpaths\_d

e. Predictors in the Model: (Constant), R\_pro, Tpaths\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Nodes	R_pro
1	1	1.921	1.000	.04	.04	
	2	.079	4.918	.96	.96	
2	1	2.869	1.000	.00	.02	.00
	2	.119	4.902	.01	.82	.05
	3	.011	16.017	.98	.17	.95
3	1	3.865	1.000	.00	.00	.00
	2	.122	5.635	.00	.19	.02
	3	.012	17.585	.06	.07	.65
	4	.001	75.420	.94	.74	.33
4	1	2.981	1.000	.00		.00
	2	.017	13.335	.05		1.00
	3	.002	34.730	.95		.00

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		Tpaths_d
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.00
	3	.01
	4	.99
4	1	.00
	2	.05
	3	.95

a. Dependent Variable: EVCout\_TpoutN

Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	- .01603741198 7782	.06337961554 5273	.01098901098 9011	.01173105512 5139
Std. Predicted Value	-2.304	4.466	.000	1.000
Standard Error of Predicted Value	.003	.014	.004	.002
Adjusted Predicted Value	- .01910271868 1097	.09483361989 2597	.01102881662 8634	.01298281531 5425
Residual	- .06337961554 5273	.08122131228 4470	.00000000000 0000	.02385343913 3864
Std. Residual	-2.627	3.367	.000	.989
Stud. Residual	-3.214	3.394	.000	1.032
Deleted Residual	- .09483361989 2597	.08252245932 8175	- .00003980563 9623	.02617095889 6271
Stud. Deleted Residual	-3.401	3.620	.008	1.064
Mahal. Distance	.016	28.862	1.978	3.813
Cook's Distance	.000	1.709	.037	.189
Centered Leverage Value	.000	.321	.022	.042

#### Residuals Statistics<sup>a</sup>

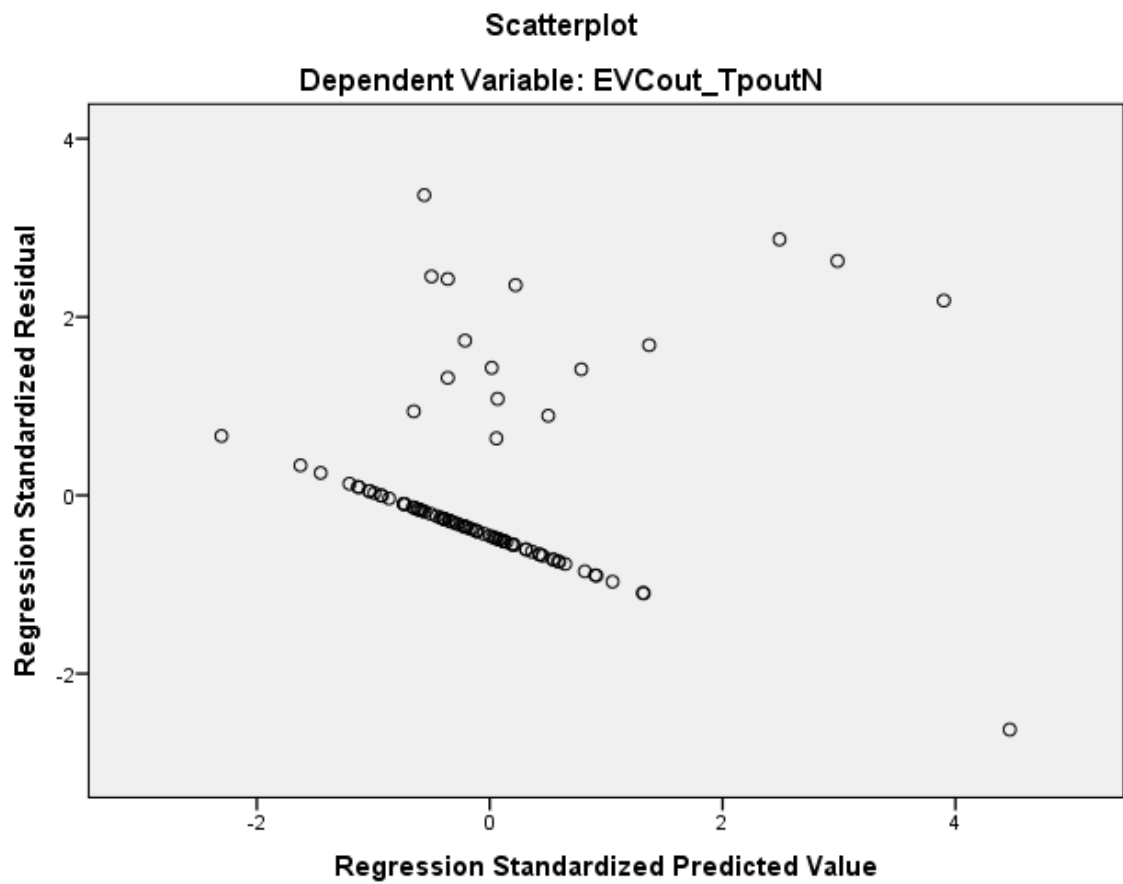
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Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91

Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCout\_TpoutN

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCout\_TSpoutN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpaths\_d  
AvgPL\_d AvgGL\_d PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCut_TSpoutN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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Variables Created or Modified	COO_4	Cook's Distance

Variables Entered/Removed<sup>a</sup>



a. Dependent Variable: EVCout\_TSpoutN

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.320 <sup>a</sup>	.102	.092	.02525619998 3753
2	.401 <sup>b</sup>	.161	.142	.02456081429 5178
3	.472 <sup>c</sup>	.222	.196	.02377741286 3352
4	.462 <sup>d</sup>	.214	.196	.02377660232 8757

a. Predictors: (Constant), Nodes

b. Predictors: (Constant), Nodes, R\_pro

c. Predictors: (Constant), Nodes, R\_pro, Tpaths\_d

d. Predictors: (Constant), R\_pro, Tpaths\_d

e. Dependent Variable: EVCout\_TSpoutN

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.006	1	.006	10.163	.002 <sup>b</sup>
	Residual	.057	89	.001		
	Total	.063	90			
2	Regression	.010	2	.005	8.429	.000 <sup>c</sup>
	Residual	.053	88	.001		
	Total	.063	90			
3	Regression	.014	3	.005	8.294	.000 <sup>d</sup>
	Residual	.049	87	.001		
	Total	.063	90			
4	Regression	.014	2	.007	11.945	.000 <sup>e</sup>
	Residual	.050	88	.001		
	Total	.063	90			

a. Dependent Variable: EVCout\_TSpoutN

b. Predictors: (Constant), Nodes

c. Predictors: (Constant), Nodes, R\_pro

d. Predictors: (Constant), Nodes, R\_pro, Tpaths\_d

e. Predictors: (Constant), R\_pro, Tpaths\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	-.009	.007		-1.314	.192
	Nodes	1.811	.568	.320	3.188	.002
2	(Constant)	.034	.018		1.827	.071
	Nodes	1.533	.564	.271	2.720	.008
	R_pro	-3.605	1.458	-.246	-2.472	.015
3	(Constant)	-.105	.056		-1.884	.063
	Nodes	-1.157	1.161	-.205	-.997	.322
	R_pro	-6.658	1.829	-.455	-3.640	.000
	Tpaths_d	18.400	7.008	.540	2.626	.010
4	(Constant)	-.063	.036		-1.732	.087
	R_pro	-5.503	1.415	-.376	-3.888	.000
	Tpaths_d	12.234	3.294	.359	3.714	.000

#### Coefficients<sup>a</sup>

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Nodes	1.000	1.000
2	(Constant)		
	Nodes	.960	1.041
	R_pro	.960	1.041
3	(Constant)		

4	Nodes	.212	4.713
	R_pro	.572	1.748
	Tpaths_d	.211	4.736
	(Constant)		
	R_pro	.956	1.046
	Tpaths_d	.956	1.046

a. Dependent Variable: EVCont\_TSpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Edges_d	-1.096 <sup>b</sup>	-1.521	.132	-.160	.019	52.286	.019
	Reciprocity	-.055 <sup>b</sup>	-.544	.588	-.058	.988	1.012	.988
	Den_d	-.056 <sup>b</sup>	-.295	.769	-.031	.280	3.576	.280
	CC_d	-.041 <sup>b</sup>	-.405	.686	-.043	.999	1.001	.999
	GD_d	-.061 <sup>b</sup>	-.607	.545	-.065	.999	1.001	.999
	Tpaths_d	.064 <sup>b</sup>	.378	.706	.040	.354	2.822	.354
	TSpaths_d	.028 <sup>b</sup>	.156	.876	.017	.316	3.161	.316
	AvgPL_d	.061 <sup>b</sup>	.598	.552	.064	.960	1.042	.960
	AvgGL_d	.014 <sup>b</sup>	.138	.890	.015	.988	1.012	.988



	PL_TpoutN	-.082 <sup>b</sup>	-.815	.417	-.087	.996	1.005	.996
	PL_TSpout N	-.159 <sup>b</sup>	-1.590	.115	-.167	.997	1.003	.997
	S_pro	-.083 <sup>b</sup>	-.819	.415	-.087	.982	1.018	.982
	R_pro	-.246 <sup>b</sup>	-2.472	.015	-.255	.960	1.041	.960
	SMSP_d	-.042 <sup>b</sup>	-.416	.678	-.044	.999	1.001	.999
2	Edges_d	-.904 <sup>c</sup>	-1.276	.205	-.136	.019	53.015	.019
	Reciprocity	-.006 <sup>c</sup>	-.062	.951	-.007	.947	1.056	.921
	Den_d	-.133 <sup>c</sup>	-.711	.479	-.076	.272	3.672	.263
	CC_d	-.025 <sup>c</sup>	-.257	.798	-.028	.994	1.006	.956
	GD_d	.078 <sup>c</sup>	.690	.492	.074	.753	1.329	.723
	Tpaths_d	.540 <sup>c</sup>	2.626	.010	.271	.211	4.736	.211
	TSpaths_d	.542 <sup>c</sup>	2.423	.017	.251	.180	5.541	.180
	AvgPL_d	.292 <sup>c</sup>	2.492	.015	.258	.658	1.521	.658
	AvgGL_d	.302 <sup>c</sup>	2.389	.019	.248	.565	1.770	.549
	PL_TpoutN	.010 <sup>c</sup>	.090	.928	.010	.857	1.167	.826
	PL_TSpout N	-.045 <sup>c</sup>	-.389	.698	-.042	.727	1.376	.700
	S_pro	.115 <sup>c</sup>	.906	.368	.097	.596	1.678	.583
	SMSP_d	-.026 <sup>c</sup>	-.265	.791	-.028	.994	1.006	.956
3	Edges_d	-1.737 <sup>d</sup>	-2.434	.017	-.254	.017	60.217	.017
	Reciprocity	-.030 <sup>d</sup>	-.306	.760	-.033	.939	1.065	.209
	Den_d	-.038 <sup>d</sup>	-.202	.840	-.022	.261	3.832	.157
	CC_d	-.045 <sup>d</sup>	-.466	.642	-.050	.989	1.011	.210

	GD_d	-.074 <sup>d</sup>	-.597	.552	-.064	.584	1.713	.164
	TSpats_d	-.039 <sup>d</sup>	-.061	.951	-.007	.022	44.742	.022
	AvgPL_d	.125 <sup>d</sup>	.613	.542	.066	.218	4.589	.070
	AvgGL_d	.119 <sup>d</sup>	.607	.545	.065	.233	4.296	.087
	PL_TpoutN	.038 <sup>d</sup>	.367	.714	.040	.847	1.180	.209
	PL_TSpout N	-.017 <sup>d</sup>	-.156	.877	-.017	.720	1.388	.206
	S_pro	.048 <sup>d</sup>	.380	.705	.041	.569	1.759	.201
	SMSP_d	-.046 <sup>d</sup>	-.479	.633	-.052	.988	1.012	.210
4	Edges_d	-.359 <sup>e</sup>	-1.670	.099	-.176	.190	5.277	.187
	Reciprocity	-.019 <sup>e</sup>	-.191	.849	-.020	.952	1.051	.910
	Den_d	.053 <sup>e</sup>	.335	.739	.036	.354	2.827	.341
	CC_d	-.037 <sup>e</sup>	-.387	.700	-.041	.995	1.005	.951
	GD_d	-.018 <sup>e</sup>	-.154	.878	-.016	.693	1.443	.693
	TSpats_d	-.262 <sup>e</sup>	-.449	.654	-.048	.027	37.732	.026
	AvgPL_d	.167 <sup>e</sup>	1.134	.260	.121	.413	2.423	.413
	AvgGL_d	.167 <sup>e</sup>	1.106	.272	.118	.390	2.563	.390
	PL_TpoutN	.028 <sup>e</sup>	.270	.788	.029	.855	1.169	.819
	PL_TSpout N	-.035 <sup>e</sup>	-.320	.750	-.034	.741	1.349	.739
	S_pro	.070 <sup>e</sup>	.566	.573	.061	.591	1.693	.589
	SMSP_d	-.038 <sup>e</sup>	-.399	.691	-.043	.995	1.006	.951
	Nodes	-.205 <sup>e</sup>	-.997	.322	-.106	.212	4.713	.211

a. Dependent Variable: EVCout\_TSpoutN

b. Predictors in the Model: (Constant), Nodes

c. Predictors in the Model: (Constant), Nodes, R\_pro

d. Predictors in the Model: (Constant), Nodes, R\_pro, Tpaths\_d

e. Predictors in the Model: (Constant), R\_pro, Tpaths\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Nodes	R_pro
1	1	1.921	1.000	.04	.04	
	2	.079	4.918	.96	.96	
2	1	2.869	1.000	.00	.02	.00
	2	.119	4.902	.01	.82	.05
	3	.011	16.017	.98	.17	.95
3	1	3.865	1.000	.00	.00	.00
	2	.122	5.635	.00	.19	.02
	3	.012	17.585	.06	.07	.65
	4	.001	75.420	.94	.74	.33
4	1	2.981	1.000	.00		.00
	2	.017	13.335	.05		1.00
	3	.002	34.730	.95		.00

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		Tpaths_d
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.00
	3	.01
	4	.99
4	1	.00
	2	.05
	3	.95

a. Dependent Variable: EVCout\_TSpoutN

Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	- .01657985337 0786	.06636448949 5754	.01098901098 9011	.01224976343 5072
Std. Predicted Value	-2.251	4.521	.000	1.000
Standard Error of Predicted Value	.003	.014	.004	.002
Adjusted Predicted Value	- .01974884048 1043	.09929982572 7940	.01102863627 8933	.01358239047 4376
Residual	- .06636448949 5754	.07146023213 8634	.00000000000 0000	.02351093362 9174
Std. Residual	-2.791	3.005	.000	.989
Stud. Residual	-3.414	3.153	.000	1.036
Deleted Residual	- .09929982572 7940	.07866340875 6256	- .00003962528 9922	.02602230805 3471
Stud. Deleted Residual	-3.645	3.329	.007	1.069
Mahal. Distance	.016	28.862	1.978	3.813
Cook's Distance	.000	1.928	.041	.212
Centered Leverage Value	.000	.321	.022	.042

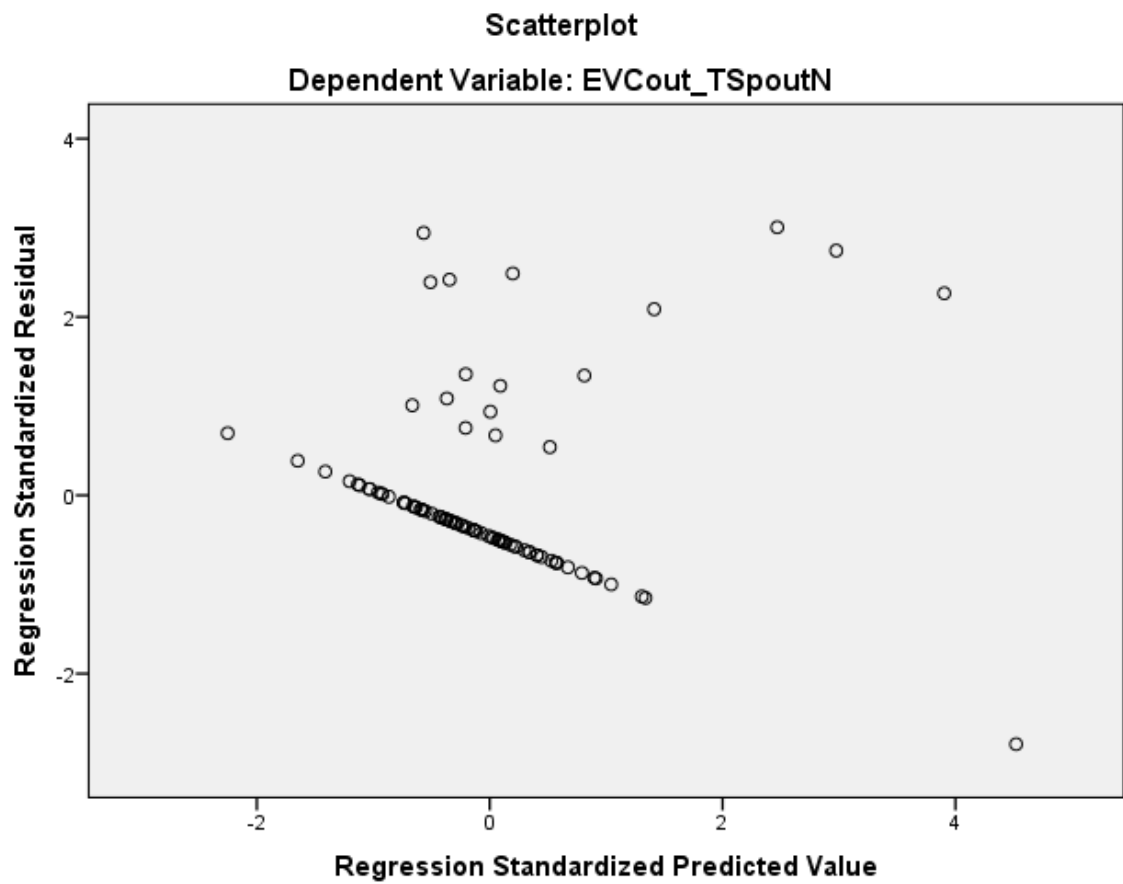
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91

Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCout\_TSpoutN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCout

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpouts\_d  
AvgPL\_d AvgGL\_d PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Cases Used	Statistics are based on cases with no missing values for any variable used.



Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT ECout  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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Variables Created or Modified	COO_5	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Reciprocity		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECont

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.579 <sup>a</sup>	.336	.328	.00244504019 1064

a. Predictors: (Constant), Reciprocity

b. Dependent Variable: ECont

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.000	1	.000	44.479	.000 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.001	89			

a. Dependent Variable: ECont

b. Predictors: (Constant), Reciprocity

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		41.349	.000
	Reciprocity	-.081	.012	-.579	-6.669	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000

a. Dependent Variable: ECont

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	-.068 <sup>b</sup>	-.769	.444	-.082	.976	1.024
	Edges_d	-.102 <sup>b</sup>	-1.171	.245	-.125	.984	1.016
	Den_d	.049 <sup>b</sup>	.552	.582	.059	.948	1.055
	CC_d	.101 <sup>b</sup>	1.054	.295	.112	.827	1.209
	GD_d	-.028 <sup>b</sup>	-.310	.757	-.033	.930	1.075
	Tpaths_d	-.095 <sup>b</sup>	-1.094	.277	-.117	.999	1.001
	TSpaths_d	-.107 <sup>b</sup>	-1.232	.221	-.131	.998	1.002
	AvgPL_d	-.015 <sup>b</sup>	-.169	.866	-.018	.931	1.074
	AvgGL_d	-.040 <sup>b</sup>	-.453	.652	-.049	.974	1.027
	PL_TpoutN	-.107 <sup>b</sup>	-1.231	.222	-.131	.991	1.009
	PL_TSpoutN	-.086 <sup>b</sup>	-.995	.322	-.106	1.000	1.000
	S_pro	.059 <sup>b</sup>	.674	.502	.072	.989	1.011
	R_pro	-.043 <sup>b</sup>	-.482	.631	-.052	.951	1.051
	SMSP_d	.099 <sup>b</sup>	1.037	.303	.111	.824	1.214

**Excluded Variables<sup>a</sup>**

Model	Collinearity Statistics
	Minimum Tolerance

1	Nodes	.976
	Edges_d	.984
	Den_d	.948
	CC_d	.827
	GD_d	.930
	Tpaths_d	.999
	TSpaths_d	.998
	AvgPL_d	.931
	AvgGL_d	.974
	PL_TpoutN	.991
	PL_TSpoutN	1.000
	S_pro	.989
	R_pro	.951
	SMSP_d	.824

a. Dependent Variable: Ecout

b. Predictors in the Model: (Constant), Reciprocity

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Reciprocity

1	1	1.458	1.000	.27	.27
	2	.542	1.641	.73	.73

a. Dependent Variable: ECont

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00494177406 6538	.01199024077 5049	.01110389379 2939	.00172849117 6307
Std. Predicted Value	-3.565	.513	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00437946198 5081	.01209546625 6142	.01109294627 4700	.00177026475 5113
Residual	- .00813855696 4695	.00438263546 6754	.00000000000 0000	.00243126520 7135
Std. Residual	-3.329	1.792	.000	.994
Stud. Residual	-3.355	1.877	.002	1.007
Deleted Residual	- .00826989579 9458	.00480770086 8696	.00001094751 8239	.00249463358 2642
Stud. Deleted Residual	-3.573	1.905	-.006	1.027
Mahal. Distance	.017	12.709	.989	2.245
Cook's Distance	.000	.172	.013	.031

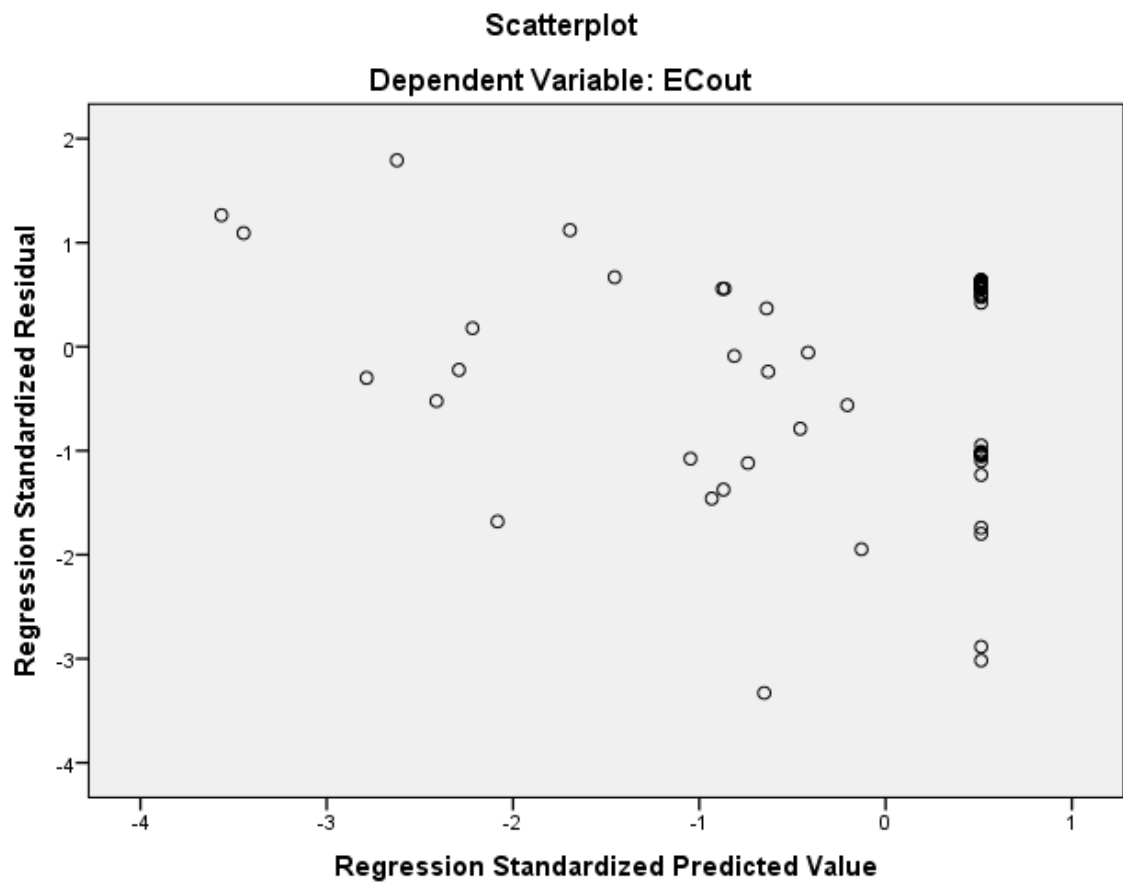
Centered Leverage Value	.000	.143	.011	.025
-------------------------	------	------	------	------

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: ECont

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCout\_TpoutN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpats\_d  
AvgPL\_d AvgGL\_d PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)



/SAVE COOK.

## Regression

### Notes

Output Created	31-MAY-2015 10:52:33	
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCut_TpoutN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.21
	Memory Required	17392 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_6	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Nodes		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCout\_TpoutN

#### Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.427 <sup>a</sup>	.183	.173	.02428182202 4274
2	.480 <sup>b</sup>	.231	.213	.02369328878 9496
3	.582 <sup>c</sup>	.339	.316	.02208686396 3126

a. Predictors: (Constant), Nodes

b. Predictors: (Constant), Nodes, R\_pro

c. Predictors: (Constant), Nodes, R\_pro, AvgPL\_d

d. Dependent Variable: EVCout\_TpoutN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.012	1	.012	19.652	.000 <sup>b</sup>
	Residual	.052	88	.001		
	Total	.063	89			
2	Regression	.015	2	.007	13.033	.000 <sup>c</sup>
	Residual	.049	87	.001		
	Total	.063	89			
3	Regression	.022	3	.007	14.704	.000 <sup>d</sup>

Residual	.042	86	.000		
Total	.063	89			

a. Dependent Variable: EVCont\_TpoutN

b. Predictors: (Constant), Nodes

c. Predictors: (Constant), Nodes, R\_pro

d. Predictors: (Constant), Nodes, R\_pro, AvgPL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.022	.008		-2.785	.007
	Nodes	3.096	.698	.427	4.433	.000
2	(Constant)	.018	.019		.941	.349
	Nodes	2.783	.695	.384	4.006	.000
	R_pro	-3.283	1.410	-.223	-2.329	.022
3	(Constant)	-.002	.018		-.096	.924
	Nodes	2.577	.650	.356	3.966	.000
	R_pro	-6.735	1.603	-.458	-4.201	.000
	AvgPL_d	5.448	1.450	.402	3.757	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Nodes	1.000	1.000
2	(Constant)		
	Nodes	.962	1.039
	R_pro	.962	1.039
3	(Constant)		
	Nodes	.956	1.046
	R_pro	.646	1.547
	AvgPL_d	.670	1.491

a. Dependent Variable: EVCout\_TpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Edges_d	-.947 <sup>b</sup>	-1.726	.088	-.182	.030	33.147	.030
	Reciprocity	-.026 <sup>b</sup>	-.265	.791	-.028	.976	1.024	.976
	Den_d	.266 <sup>b</sup>	1.382	.170	.147	.249	4.017	.249

	CC_d	-.038 <sup>b</sup>	-.388	.699	-.042	.999	1.001	.999
	GD_d	.010 <sup>b</sup>	.103	.918	.011	.969	1.032	.969
	Tpaths_d	.067 <sup>b</sup>	.483	.630	.052	.494	2.025	.494
	TSpaths_d	-.006 <sup>b</sup>	-.038	.970	-.004	.418	2.391	.418
	AvgPL_d	.145 <sup>b</sup>	1.509	.135	.160	.998	1.002	.998
	AvgGL_d	.073 <sup>b</sup>	.758	.450	.081	.998	1.002	.998
	PL_TpoutN	-.033 <sup>b</sup>	-.340	.734	-.036	.991	1.009	.991
	PL_TSpout N	-.149 <sup>b</sup>	-1.554	.124	-.164	.998	1.002	.998
	S_pro	-.068 <sup>b</sup>	-.702	.484	-.075	.985	1.016	.985
	R_pro	-.223 <sup>b</sup>	-2.329	.022	-.242	.962	1.039	.962
	SMSP_d	-.039 <sup>b</sup>	-.403	.688	-.043	.999	1.001	.999
2	Edges_d	-.804 <sup>c</sup>	-1.484	.141	-.158	.030	33.656	.029
	Reciprocity	.018 <sup>c</sup>	.189	.850	.020	.938	1.066	.925
	Den_d	.180 <sup>c</sup>	.933	.354	.100	.238	4.209	.230
	CC_d	-.024 <sup>c</sup>	-.249	.804	-.027	.995	1.005	.959
	GD_d	.160 <sup>c</sup>	1.467	.146	.156	.729	1.371	.724
	Tpaths_d	.442 <sup>c</sup>	2.639	.010	.274	.295	3.387	.295
	TSpaths_d	.386 <sup>c</sup>	2.031	.045	.214	.236	4.238	.236
	AvgPL_d	.402 <sup>c</sup>	3.757	.000	.375	.670	1.491	.646
	AvgGL_d	.383 <sup>c</sup>	3.229	.002	.329	.567	1.765	.546
	PL_TpoutN	.056 <sup>c</sup>	.551	.583	.059	.855	1.170	.830

	PL_TSpout N	-.047 <sup>c</sup>	-.425	.672	-.046	.726	1.378	.700
	S_pro	.115 <sup>c</sup>	.946	.347	.101	.598	1.672	.585
	SMSP_d	-.025 <sup>c</sup>	-.261	.795	-.028	.994	1.006	.958
3	Edges_d	-.835 <sup>d</sup>	-1.658	.101	-.177	.030	33.665	.029
	Reciprocity	-.045 <sup>d</sup>	-.482	.631	-.052	.907	1.102	.644
	Den_d	.164 <sup>d</sup>	.911	.365	.098	.237	4.212	.229
	CC_d	-.065 <sup>d</sup>	-.733	.465	-.079	.980	1.021	.646
	GD_d	-.092 <sup>d</sup>	-.733	.466	-.079	.487	2.051	.448
	Tpaths_d	-.289 <sup>d</sup>	-.924	.358	-.100	.079	12.691	.079
	TSpaths_d	-.201 <sup>d</sup>	-.776	.440	-.084	.116	8.656	.116
	AvgGL_d	.061 <sup>d</sup>	.288	.774	.031	.173	5.768	.173
	PL_TpoutN	.098 <sup>d</sup>	1.026	.308	.111	.844	1.185	.559
	PL_TSpout N	.027 <sup>d</sup>	.259	.796	.028	.700	1.429	.466
	S_pro	.021 <sup>d</sup>	.178	.859	.019	.568	1.760	.499
	SMSP_d	-.066 <sup>d</sup>	-.747	.457	-.081	.979	1.021	.646

a. Dependent Variable: EVCout\_TpoutN

b. Predictors in the Model: (Constant), Nodes

c. Predictors in the Model: (Constant), Nodes, R\_pro

d. Predictors in the Model: (Constant), Nodes, R\_pro, AvgPL\_d



Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Nodes	R_pro
1	1	1.946	1.000	.03	.03	
	2	.054	5.997	.97	.97	
2	1	2.904	1.000	.00	.01	.00
	2	.085	5.843	.02	.78	.08
	3	.011	16.427	.98	.21	.92
3	1	3.879	1.000	.00	.01	.00
	2	.097	6.339	.00	.77	.03
	3	.015	16.336	.43	.05	.06
	4	.010	19.448	.57	.17	.92

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		AvgPL_d
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.02

3	.82
4	.16

a. Dependent Variable: EVCout\_TpoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .01772320084 2738	.09448670595 8843	.01111111111 1111	.01554946326 5811
Std. Predicted Value	-1.854	5.362	.000	1.000
Standard Error of Predicted Value	.002	.016	.004	.002
Adjusted Predicted Value	- .02125734649 5986	.08083046972 7516	.01094586341 2398	.01464027091 8103
Residual	- .02992396242 9166	.08366445451 9749	.00000000000 0000	.02171142249 3728
Std. Residual	-1.355	3.788	.000	.983
Stud. Residual	-1.422	3.820	.003	1.009
Deleted Residual	- .03561524674 2964	.08508884906 7688	.00016524769 8713	.02294140781 1462
Stud. Deleted Residual	-1.431	4.168	.014	1.041
Mahal. Distance	.039	46.414	2.967	6.912

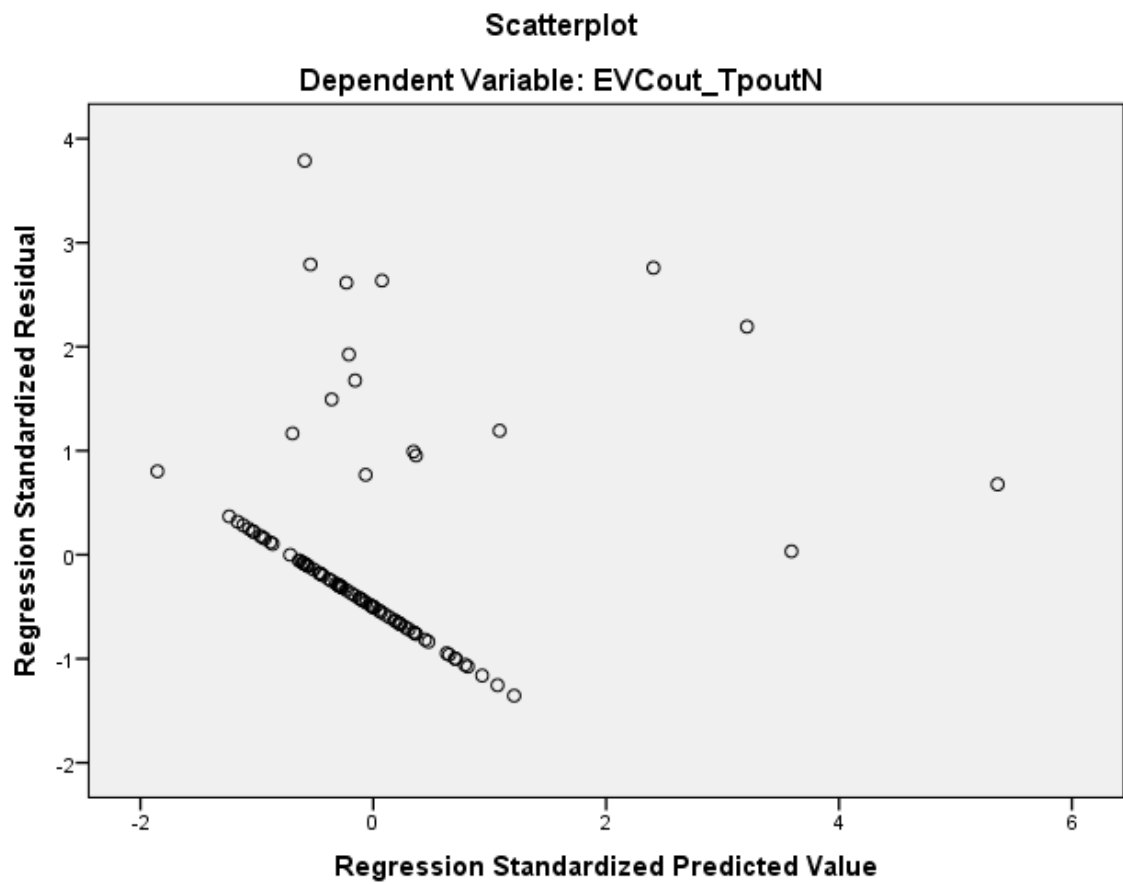
Cook's Distance	.000	.242	.015	.043
Centered Leverage Value	.000	.522	.033	.078

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: EVCut\_TpoutN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCout\_TSpoutN

/METHOD=STEPWISE Nodes Edges\_d Reciprocity Den\_d CC\_d GD\_d Tpaths\_d TSpaths\_d  
AvgPL\_d AvgGL\_d PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

```
/SCATTERPLOT=(*ZRESID ,*ZPRED)
```

```
/SAVE COOK.
```

## Regression

### Notes

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Comments		
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	Filter	<none>
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	Split File	<none>
	N of Rows in Working Data File	90
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCut_TSpoutN  /METHOD=STEPWISE Nodes Edges_d Reciprocity Den_d CC_d GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.20
	Memory Required	17440 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Nodes		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCout\_TSpoutN

#### Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.445 <sup>a</sup>	.198	.189	.02398660416 4399
2	.498 <sup>b</sup>	.248	.230	.02336362117 9316
3	.616 <sup>c</sup>	.379	.358	.02134630849 8873

a. Predictors: (Constant), Nodes

b. Predictors: (Constant), Nodes, R\_pro

c. Predictors: (Constant), Nodes, R\_pro, AvgPL\_d

d. Dependent Variable: EVCout\_TSpoutN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.013	1	.013	21.726	.000 <sup>b</sup>
	Residual	.051	88	.001		
	Total	.063	89			
2	Regression	.016	2	.008	14.328	.000 <sup>c</sup>
	Residual	.047	87	.001		
	Total	.063	89			
3	Regression	.024	3	.008	17.516	.000 <sup>d</sup>



Residual	.039	86	.000		
Total	.063	89			

a. Dependent Variable: EVCut\_TSpoutN

b. Predictors: (Constant), Nodes

c. Predictors: (Constant), Nodes, R\_pro

d. Predictors: (Constant), Nodes, R\_pro, AvgPL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.023	.008		-2.983	.004
	Nodes	3.216	.690	.445	4.661	.000
2	(Constant)	.017	.018		.918	.361
	Nodes	2.898	.685	.401	4.230	.000
	R_pro	-3.335	1.390	-.227	-2.399	.019
3	(Constant)	-.004	.017		-.245	.807
	Nodes	2.672	.628	.370	4.254	.000
	R_pro	-7.124	1.550	-.486	-4.598	.000
	AvgPL_d	5.982	1.402	.443	4.269	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Nodes	1.000	1.000
2	(Constant)		
	Nodes	.962	1.039
	R_pro	.962	1.039
3	(Constant)		
	Nodes	.956	1.046
	R_pro	.646	1.547
	AvgPL_d	.670	1.491

a. Dependent Variable: EVCout\_TSpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Edges_d	-1.026 <sup>b</sup>	-1.894	.062	-.199	.030	33.147	.030
	Reciprocity	-.021 <sup>b</sup>	-.221	.826	-.024	.976	1.024	.976
	Den_d	.257 <sup>b</sup>	1.349	.181	.143	.249	4.017	.249

	CC_d	-.037 <sup>b</sup>	-.386	.700	-.041	.999	1.001	.999
	GD_d	.014 <sup>b</sup>	.142	.888	.015	.969	1.032	.969
	Tpaths_d	.087 <sup>b</sup>	.639	.525	.068	.494	2.025	.494
	TSpaths_d	.002 <sup>b</sup>	.013	.990	.001	.418	2.391	.418
	AvgPL_d	.170 <sup>b</sup>	1.797	.076	.189	.998	1.002	.998
	AvgGL_d	.082 <sup>b</sup>	.854	.395	.091	.998	1.002	.998
	PL_TpoutN	-.062 <sup>b</sup>	-.642	.522	-.069	.991	1.009	.991
	PL_TSpout N	-.161 <sup>b</sup>	-1.705	.092	-.180	.998	1.002	.998
	S_pro	-.073 <sup>b</sup>	-.756	.452	-.081	.985	1.016	.985
	R_pro	-.227 <sup>b</sup>	-2.399	.019	-.249	.962	1.039	.962
	SMSP_d	-.039 <sup>b</sup>	-.402	.689	-.043	.999	1.001	.999
2	Edges_d	-.882 <sup>c</sup>	-1.650	.103	-.175	.030	33.656	.029
	Reciprocity	.024 <sup>c</sup>	.250	.803	.027	.938	1.066	.925
	Den_d	.169 <sup>c</sup>	.886	.378	.095	.238	4.209	.230
	CC_d	-.023 <sup>c</sup>	-.244	.808	-.026	.995	1.005	.959
	GD_d	.168 <sup>c</sup>	1.557	.123	.166	.729	1.371	.724
	Tpaths_d	.482 <sup>c</sup>	2.939	.004	.302	.295	3.387	.295
	TSpaths_d	.407 <sup>c</sup>	2.171	.033	.228	.236	4.238	.236
	AvgPL_d	.443 <sup>c</sup>	4.269	.000	.418	.670	1.491	.646
	AvgGL_d	.403 <sup>c</sup>	3.458	.001	.349	.567	1.765	.546
	PL_TpoutN	.025 <sup>c</sup>	.245	.807	.026	.855	1.170	.830

	PL_TSpout N	-.061 <sup>c</sup>	-.559	.577	-.060	.726	1.378	.700
	S_pro	.112 <sup>c</sup>	.930	.355	.100	.598	1.672	.585
	SMSP_d	-.024 <sup>c</sup>	-.256	.798	-.028	.994	1.006	.958
3	Edges_d	-.916 <sup>d</sup>	-1.885	.063	-.200	.030	33.665	.029
	Reciprocity	-.045 <sup>d</sup>	-.504	.616	-.055	.907	1.102	.644
	Den_d	.152 <sup>d</sup>	.868	.388	.094	.237	4.212	.229
	CC_d	-.068 <sup>d</sup>	-.796	.428	-.086	.980	1.021	.646
	GD_d	-.114 <sup>d</sup>	-.939	.350	-.101	.487	2.051	.448
	Tpaths_d	-.334 <sup>d</sup>	-1.105	.272	-.119	.079	12.691	.079
	TSpaths_d	-.258 <sup>d</sup>	-1.033	.304	-.111	.116	8.656	.116
	AvgGL_d	.004 <sup>d</sup>	.020	.984	.002	.173	5.768	.173
	PL_TpoutN	.070 <sup>d</sup>	.756	.452	.082	.844	1.185	.559
	PL_TSpout N	.020 <sup>d</sup>	.199	.843	.022	.700	1.429	.466
	S_pro	.007 <sup>d</sup>	.064	.949	.007	.568	1.760	.499
	SMSP_d	-.070 <sup>d</sup>	-.811	.420	-.088	.979	1.021	.646

a. Dependent Variable: EVCut\_TSpoutN

b. Predictors in the Model: (Constant), Nodes

c. Predictors in the Model: (Constant), Nodes, R\_pro

d. Predictors in the Model: (Constant), Nodes, R\_pro, AvgPL\_d

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Nodes	R_pro
1	1	1.946	1.000	.03	.03	
	2	.054	5.997	.97	.97	
2	1	2.904	1.000	.00	.01	.00
	2	.085	5.843	.02	.78	.08
	3	.011	16.427	.98	.21	.92
3	1	3.879	1.000	.00	.01	.00
	2	.097	6.339	.00	.77	.03
	3	.015	16.336	.43	.05	.06
	4	.010	19.448	.57	.17	.92

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		AvgPL_d
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.02

3	.82
4	.16

a. Dependent Variable: EVCout\_TSpoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .01862017065 2866	.09779722243 5474	.01111111111 1111	.01640244672 9707
Std. Predicted Value	-1.813	5.285	.000	1.000
Standard Error of Predicted Value	.002	.016	.004	.002
Adjusted Predicted Value	- .02233318053 1859	.08418512344 3604	.01089473430 1232	.01531226782 0062
Residual	- .03060821816 3252	.07249780744 3142	.00000000000 0000	.02098345529 1536
Std. Residual	-1.434	3.396	.000	.983
Stud. Residual	-1.626	3.425	.004	1.012
Deleted Residual	- .03935278207 0637	.07373208552 5990	.00021637680 9880	.02230403076 9600
Stud. Deleted Residual	-1.642	3.664	.014	1.041
Mahal. Distance	.039	46.414	2.967	6.912

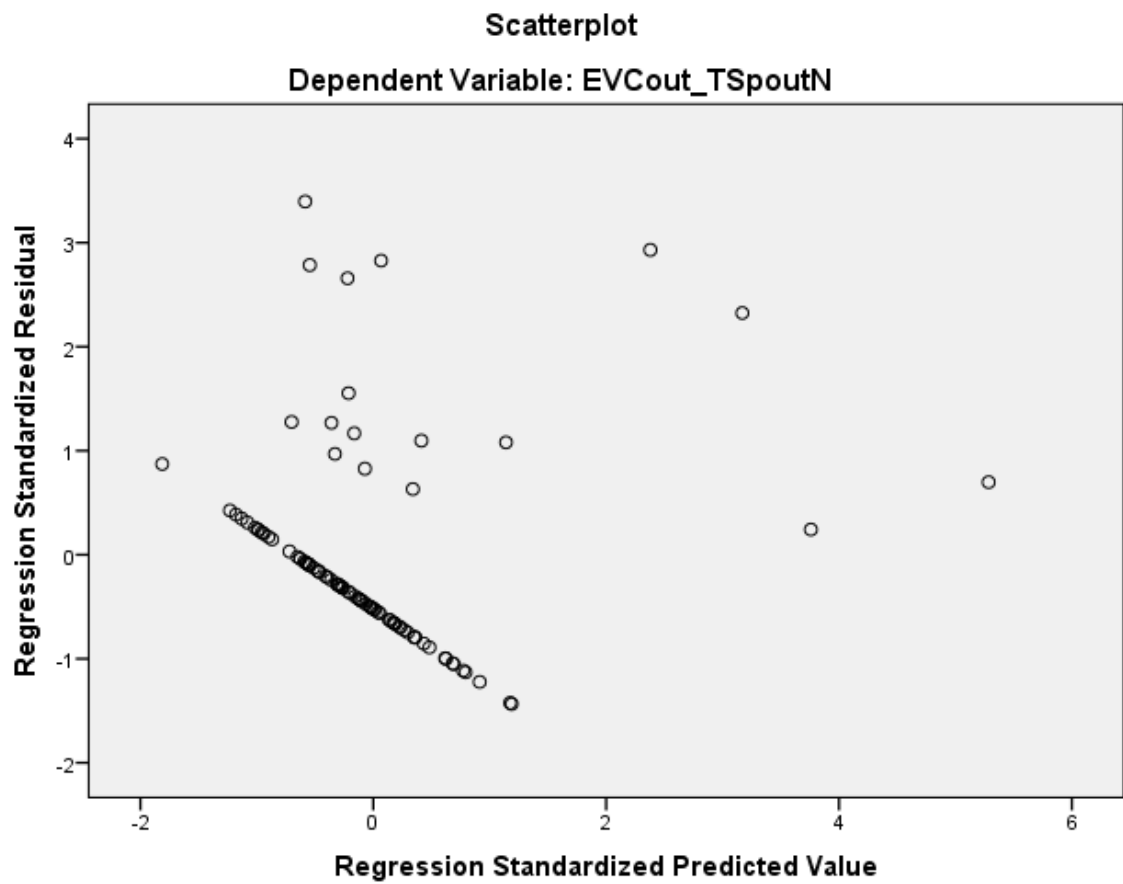
Cook's Distance	.000	.271	.017	.049
Centered Leverage Value	.000	.522	.033	.078

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: EVCout\_TSpoutN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCout

/METHOD=STEPWISE GD\_d Tpaths\_d TSpouts\_d AvgPL\_d AvgGL\_d



```
/SCATTERPLOT=(*ZRESID ,*ZPRED)
```

```
/SAVE COOK.
```

## Regression

### Notes

Output Created		31-MAY-2015 10:43:05
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT ECoat
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpats_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.19
	Memory Required	5920 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_1	
Modified		Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	---------	--	---

a. Dependent Variable: Ecout

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.273 <sup>a</sup>	.075	.064	.00305924100 2711

a. Predictors: (Constant), AvgPL\_d

b. Dependent Variable: Ecout

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	7.173	.009 <sup>b</sup>
	Residual	.001	89	.000		

Total	.001	90			
-------	------	----	--	--	--

a. Dependent Variable: ECont

b. Predictors: (Constant), AvgPL\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.015	.002		9.062	.000
AvgPL_d	-.409	.153	-.273	-2.678	.009

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
AvgPL_d	1.000	1.000

a. Dependent Variable: ECont

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.065 <sup>b</sup>	-.459	.648	-.049	.518	1.930
	Tpaths_d	-.160 <sup>b</sup>	-1.165	.247	-.123	.546	1.832
	TSpaths_d	-.119 <sup>b</sup>	-.950	.345	-.101	.659	1.517
	AvgGL_d	.203 <sup>b</sup>	.902	.369	.096	.205	4.869

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.518	
	Tpaths_d	.546	
	TSpaths_d	.659	
	AvgGL_d	.205	

a. Dependent Variable: Ecout

b. Predictors in the Model: (Constant), AvgPL\_d

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	AvgPL_d

1	1	1.982	1.000	.01	.01
	2	.018	10.562	.99	.99

a. Dependent Variable: ECont

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00616540713 2357	.01148597802 9668	.01098901098 9011	.00086366293 7250
Std. Predicted Value	-5.585	.575	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00434985384 3451	.01151628140 3601	.01097935931 4138	.00095299256 2984
Residual	- .00875213369 7271	.00398951815 4413	.00000000000 0000	.00304219774 4737
Std. Residual	-2.861	1.304	.000	.994
Stud. Residual	-2.880	1.337	.001	1.011
Deleted Residual	- .00887052249 1634	.00507739325 9853	.00000965167 4873	.00314957621 7866
Stud. Deleted Residual	-3.008	1.343	-.004	1.023
Mahal. Distance	.001	31.193	.989	3.831
Cook's Distance	.000	.578	.019	.079

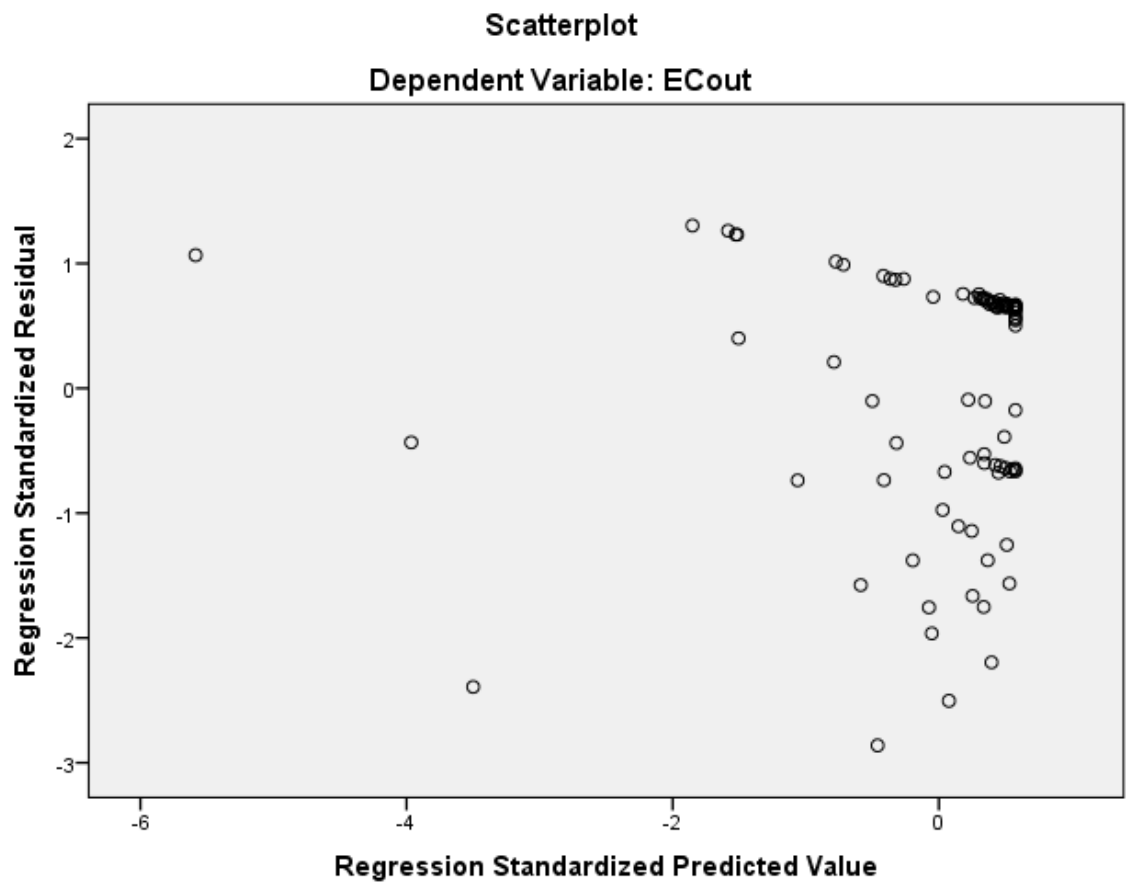
Centered Leverage Value	.000	.347	.011	.043
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#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECont

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCoutN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.



## Regression

### Notes

Output Created		31-MAY-2015 10:43:29
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_EVCoutN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpats_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.17
	Memory Required	5952 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_2	Cook's Distance
Modified		

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCoutN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.346 <sup>a</sup>	.119	.110	.01444862185 9804
2	.402 <sup>b</sup>	.161	.142	.01418061593 9451

a. Predictors: (Constant), GD\_d

b. Predictors: (Constant), GD\_d, Tpaths\_d

c. Dependent Variable: PL\_EVCoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.003	1	.003	12.074	.001 <sup>b</sup>
	Residual	.019	89	.000		
	Total	.021	90			
2	Regression	.003	2	.002	8.465	.000 <sup>c</sup>
	Residual	.018	88	.000		
	Total	.021	90			

a. Dependent Variable: PL\_EVCoutN

b. Predictors: (Constant), GD\_d

c. Predictors: (Constant), GD\_d, Tpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.005	.005		-1.094	.277

	GD_d	1.494	.430	.346	3.475	.001
2	(Constant)	-.049	.021		-2.296	.024
	GD_d	1.162	.451	.269	2.577	.012
	Tpaths_d	4.301	2.052	.219	2.097	.039

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.876	1.141
	Tpaths_d	.876	1.141

a. Dependent Variable: PL\_EVCoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	.219 <sup>b</sup>	2.097	.039	.218	.876	1.141
	TSpaths_d	.199 <sup>b</sup>	1.953	.054	.204	.923	1.084
	AvgPL_d	.141 <sup>b</sup>	1.019	.311	.108	.518	1.930

	AvgGL_d	.096 <sup>b</sup>	.753	.454	.080	.608	1.646
2	TSpaths_d	-.501 <sup>c</sup>	-.746	.458	-.080	.021	47.186
	AvgPL_d	-.068 <sup>c</sup>	-.387	.700	-.041	.307	3.254
	AvgGL_d	-.055 <sup>c</sup>	-.375	.708	-.040	.443	2.257

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.876
	TSpaths_d	.923
	AvgPL_d	.518
	AvgGL_d	.608
2	TSpaths_d	.020
	AvgPL_d	.307
	AvgGL_d	.443

a. Dependent Variable: PL\_EVCoutN

b. Predictors in the Model: (Constant), GD\_d

c. Predictors in the Model: (Constant), GD\_d, Tpaths\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	GD_d	Tpaths_d
1	1	1.952	1.000	.02	.02	
	2	.048	6.396	.98	.98	
2	1	2.938	1.000	.00	.01	.00
	2	.059	7.035	.02	.92	.01
	3	.002	35.660	.98	.07	.99

a. Dependent Variable: PL\_EVCoutN

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00096794456 4763	.03437853604 5551	.01098901098 9011	.00615047409 7075
Std. Predicted Value	-1.629	3.803	.000	1.000
Standard Error of Predicted Value	.001	.008	.002	.001
Adjusted Predicted Value	.00100967823 5278	.03881834447 3839	.01097980232 8832	.00610453141 3528
Residual	- .03290634974 8373	.03617724031 2099	.00000000000 0000	.01402216833 0165
Std. Residual	-2.321	2.551	.000	.989
Stud. Residual	-2.520	2.606	.000	1.014

Deleted Residual	- .03881834447 3839	.03775246441 3643	.00000920866 0179	.01478971783 1487
Stud. Deleted Residual	-2.602	2.697	.003	1.024
Mahal. Distance	.002	25.529	1.978	3.423
Cook's Distance	.000	.626	.020	.077
Centered Leverage Value	.000	.284	.022	.038

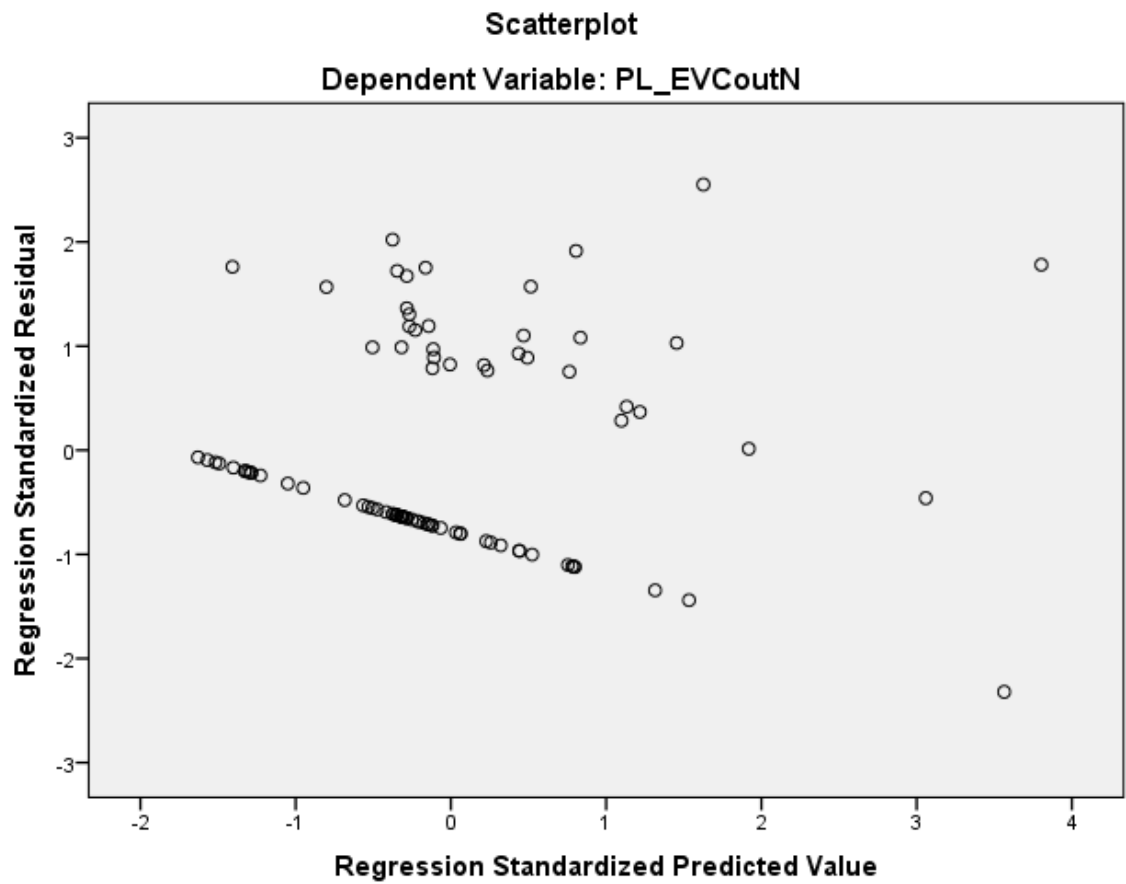
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCoutN



## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCut_TpoutN

/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created	31-MAY-2015 10:43:46	
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCout_TpoutN  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.19
	Memory Required	6000 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_3	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCout\_TpoutN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.261 <sup>a</sup>	.068	.058	.02580571559 2047

a. Predictors: (Constant), Tpaths\_d

b. Dependent Variable: EVCout\_TpoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	6.496	.013 <sup>b</sup>
	Residual	.059	89	.001		
	Total	.064	90			

a. Dependent Variable: EVCout\_TpoutN

b. Predictors: (Constant), Tpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.087	.039		-2.257	.026
	Tpaths_d	8.908	3.495	.261	2.549	.013

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_d	1.000	1.000

a. Dependent Variable: EVCout\_TpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.186 <sup>b</sup>	-1.723	.088	-.181	.876	1.141
	TSpaths_d	.068 <sup>b</sup>	.108	.914	.012	.027	37.537
	AvgPL_d	-.137 <sup>b</sup>	-.991	.324	-.105	.546	1.832
	AvgGL_d	-.179 <sup>b</sup>	-1.406	.163	-.148	.640	1.562

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.876
	TSpaths_d	.027
	AvgPL_d	.546
	AvgGL_d	.640

a. Dependent Variable: EVCout\_TpoutN

b. Predictors in the Model: (Constant), Tpaths\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Tpaths_d
1	1	1.998	1.000	.00	.00
	2	.002	28.430	1.00	1.00

a. Dependent Variable: EVCout\_TpoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00253678276 2036	.04598907008 7671	.01098901098 9011	.00693314740 5532
Std. Predicted Value	-1.951	5.048	.000	1.000
Standard Error of Predicted Value	.003	.014	.004	.001
Adjusted Predicted Value	- .00267954193 9870	.06515421718 3590	.01108825251 1952	.00800688129 1993
Residual	- .04598907008 7671	.09400366246 7003	.00000000000 0000	.02566195004 1164
Std. Residual	-1.782	3.643	.000	.994
Stud. Residual	-2.121	3.671	-.002	1.016

Deleted Residual	- .06515421718 3590	.09548754990 1009	- .00009924152 2941	.02684609476 7199
Stud. Deleted Residual	-2.165	3.963	.011	1.056
Mahal. Distance	.001	25.485	.989	2.837
Cook's Distance	.000	.938	.025	.111
Centered Leverage Value	.000	.283	.011	.032

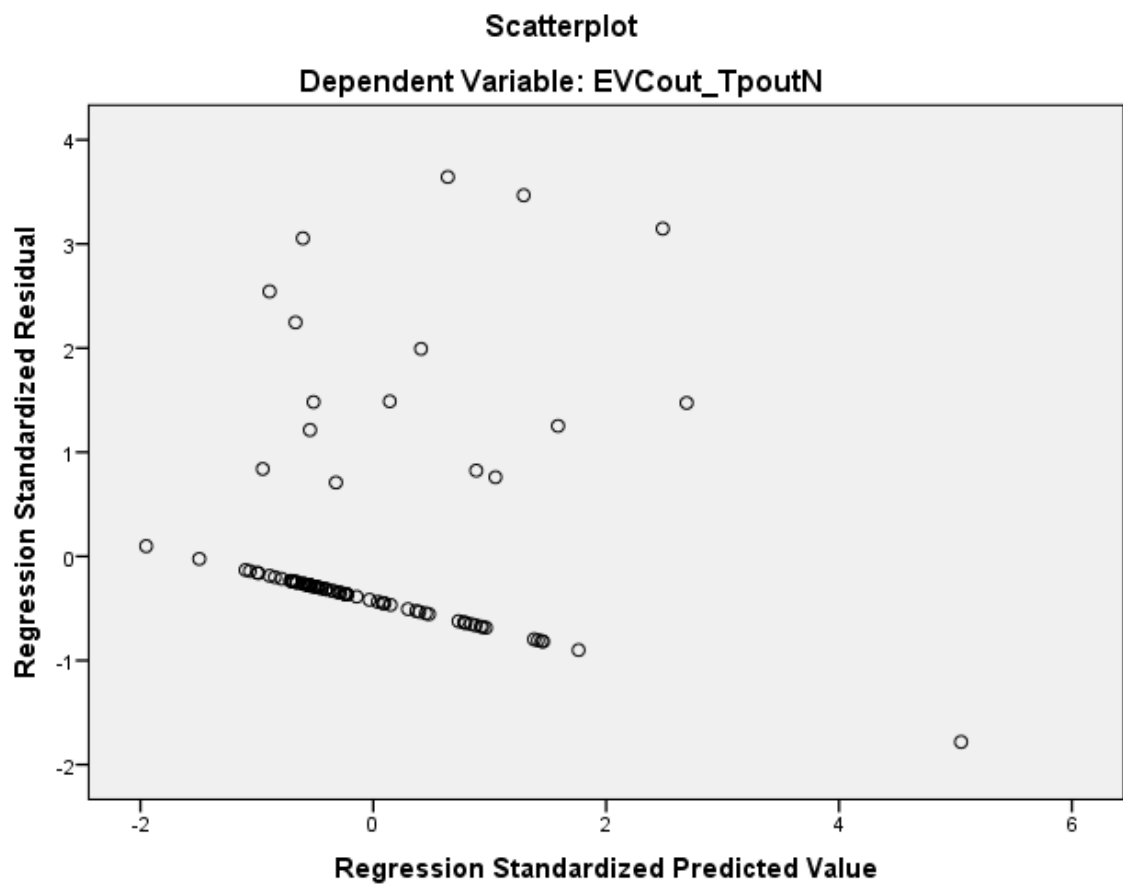
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCout\_TpoutN



## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCut_TSpoutN

/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created	31-MAY-2015 10:44:03	
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCout_TSpoutN  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.24
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCout\_TSpoutN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.280 <sup>a</sup>	.078	.068	.02559334609 1718

a. Predictors: (Constant), Tpaths\_d

b. Dependent Variable: EVCout\_TSpoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.005	1	.005	7.568	.007 <sup>b</sup>
	Residual	.058	89	.001		
	Total	.063	90			

a. Dependent Variable: EVCout\_TSpoutN

b. Predictors: (Constant), Tpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.094	.038		-2.456	.016
	Tpaths_d	9.536	3.466	.280	2.751	.007

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_d	1.000	1.000

a. Dependent Variable: EVCout\_TSpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.193 <sup>b</sup>	-1.802	.075	-.189	.876	1.141
	TSpaths_d	-.099 <sup>b</sup>	-.157	.875	-.017	.027	37.537
	AvgPL_d	-.120 <sup>b</sup>	-.869	.387	-.092	.546	1.832
	AvgGL_d	-.185 <sup>b</sup>	-1.466	.146	-.154	.640	1.562

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.876	
	TSpaths_d	.027	
	AvgPL_d	.546	
	AvgGL_d	.640	

a. Dependent Variable: EVCout\_TSpoutN

b. Predictors in the Model: (Constant), Tpaths\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Tpaths_d
1	1	1.998	1.000	.00	.00
	2	.002	28.430	1.00	1.00

a. Dependent Variable: EVCout\_TSpoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00348959211 2601	.04845460876 8225	.01098901098 9011	.00742154519 5943
Std. Predicted Value	-1.951	5.048	.000	1.000
Standard Error of Predicted Value	.003	.014	.004	.001
Adjusted Predicted Value	- .00368597148 9176	.06864722818 1362	.01108997298 4820	.00854018641 4049
Residual	- .04845460876 8225	.09695331752 3003	.00000000000 0000	.02545076366 7034
Std. Residual	-1.893	3.788	.000	.994
Stud. Residual	-2.253	3.818	-.002	1.018

Deleted Residual	- .06864722818 1362	.09848376363 5159	- .00010096199 5809	.02672993885 8173
Stud. Deleted Residual	-2.308	4.152	.012	1.061
Mahal. Distance	.001	25.485	.989	2.837
Cook's Distance	.000	1.058	.027	.125
Centered Leverage Value	.000	.283	.011	.032

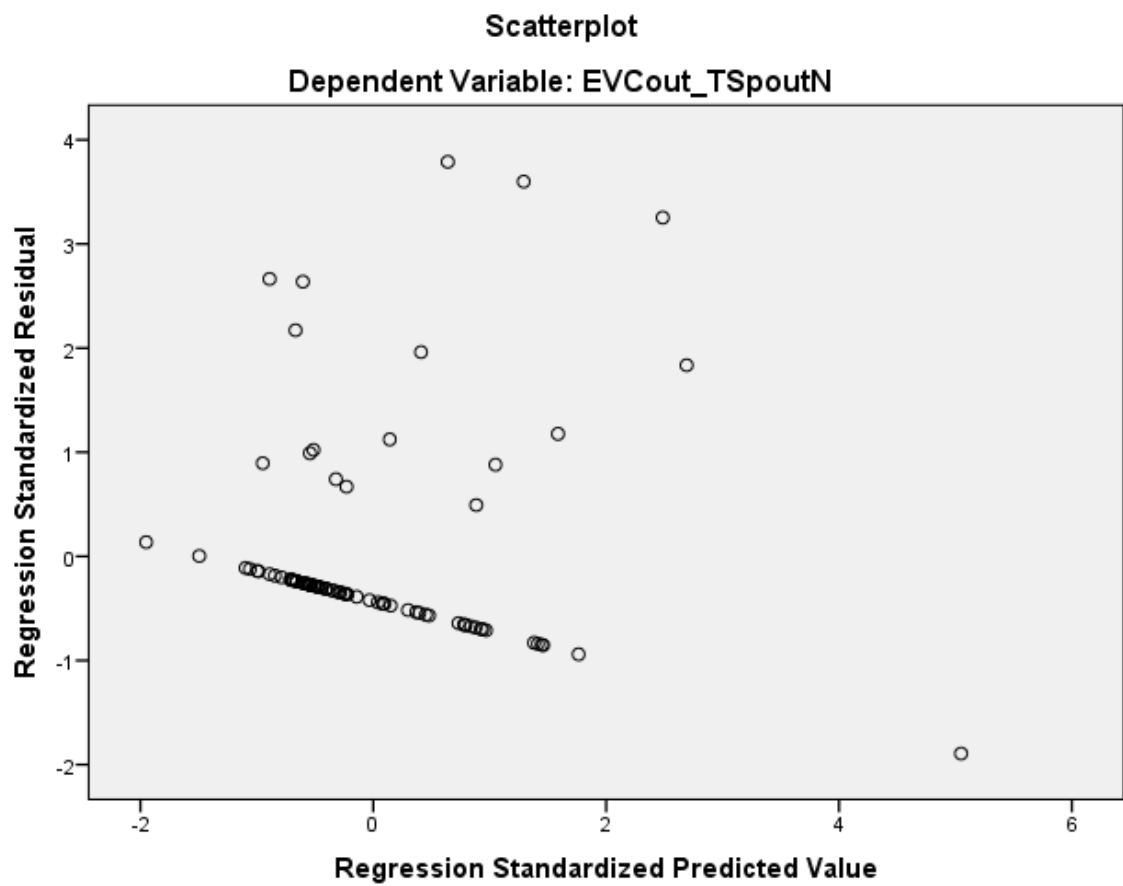
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCout\_TSpoutN



## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCut_TSpoutN

/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created	31-MAY-2015 10:44:31	
Comments		
Input	Active Dataset	DataSet8
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCout_TSpoutN  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.17
	Memory Required	6080 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_5	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCout\_TSpoutN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.360 <sup>a</sup>	.129	.119	.02499328294 1857

a. Predictors: (Constant), Tpaths\_d

b. Dependent Variable: EVCout\_TSpoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.008	1	.008	13.065	.001 <sup>b</sup>
	Residual	.055	88	.001		
	Total	.063	89			

a. Dependent Variable: EVCout\_TSpoutN

b. Predictors: (Constant), Tpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.147	.044		-3.355	.001
	Tpaths_d	14.483	4.007	.360	3.615	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_d	1.000	1.000

a. Dependent Variable: EVCout\_TSpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.197 <sup>b</sup>	-1.913	.059	-.201	.901	1.110
	TSpaths_d	-.399 <sup>b</sup>	-.730	.467	-.078	.033	30.036
	AvgPL_d	-.107 <sup>b</sup>	-.852	.397	-.091	.633	1.580
	AvgGL_d	-.220 <sup>b</sup>	-1.831	.070	-.193	.666	1.503

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.901
	TSpaths_d	.033
	AvgPL_d	.633
	AvgGL_d	.666

a. Dependent Variable: EVCout\_TSpoutN

b. Predictors in the Model: (Constant), Tpaths\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Tpaths_d
1	1	1.998	1.000	.00	.00
	2	.002	33.324	1.00	1.00

a. Dependent Variable: EVCout\_TSpoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .01024715043 6044	.04207625240 0875	.01111111111 1111	.00957602011 6414
Std. Predicted Value	-2.230	3.234	.000	1.000
Standard Error of Predicted Value	.003	.009	.004	.001
Adjusted Predicted Value	- .01098308246 5827	.03678558021 7838	.01098163107 8882	.00930619229 9163
Residual	- .03162317723 0358	.09373462200 1648	.00000000000 0000	.02485247459 3546
Std. Residual	-1.265	3.750	.000	.994
Stud. Residual	-1.307	3.786	.002	1.013

Deleted Residual	- .03373731300 2348	.09551645815 3725	.00012948003 2229	.02581045637 6139
Stud. Deleted Residual	-1.312	4.114	.015	1.053
Mahal. Distance	.001	10.456	.989	1.666
Cook's Distance	.000	.603	.020	.072
Centered Leverage Value	.000	.117	.011	.019

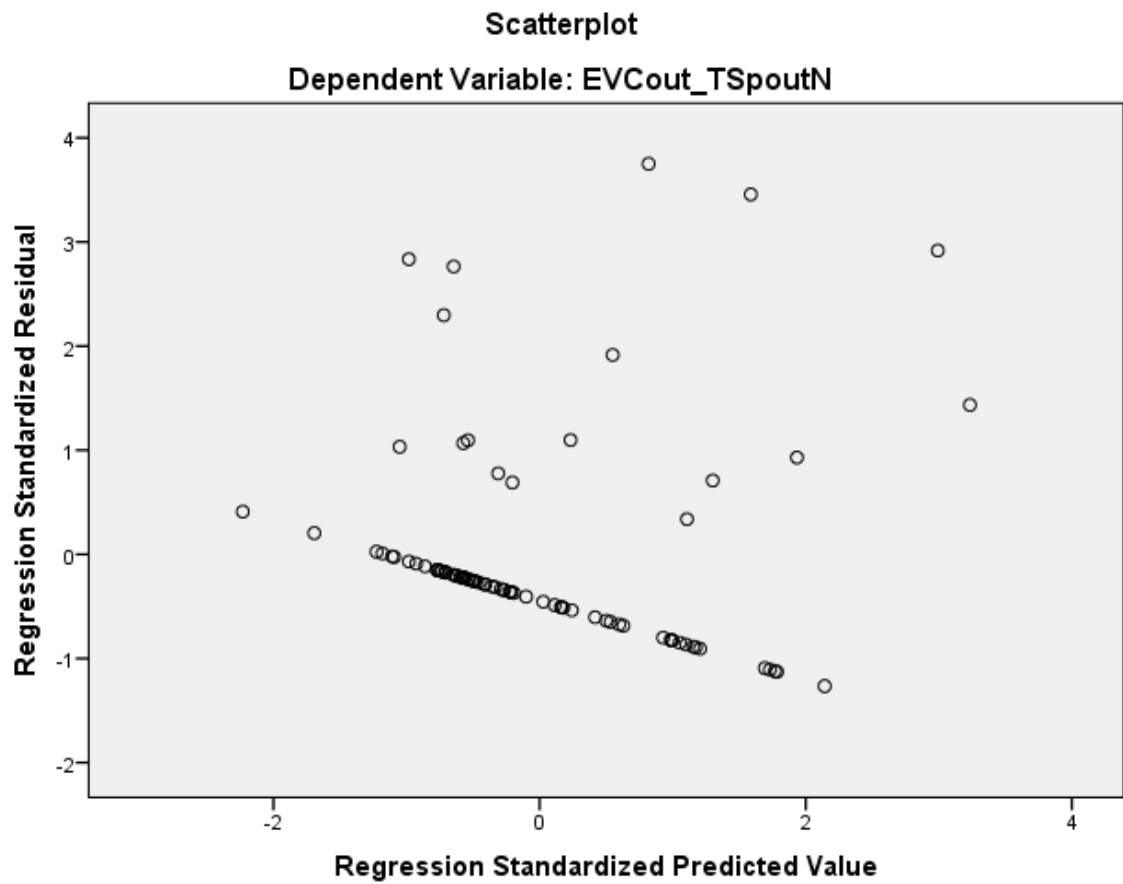
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: EVCout\_TSpoutN



## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL_TpoutN

/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:38:36	
Comments			
Input	Active Dataset	DataSet7	
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	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File	91	

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION
		/MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_TpoutN  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.17
	Memory Required	5920 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_1	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_TpoutN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.245 <sup>a</sup>	.060	.050	.00937220174 2906

a. Predictors: (Constant), GD\_d

b. Dependent Variable: PL\_TpoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	5.701	.019 <sup>b</sup>
	Residual	.008	89	.000		
	Total	.008	90			

a. Dependent Variable: PL\_TpoutN

b. Predictors: (Constant), GD\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.004	.003		1.140	.257
	GD_d	.666	.279	.245	2.388	.019

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000

a. Dependent Variable: PL\_TpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.049 <sup>b</sup>	-.448	.655	-.048	.876	1.141
	TSpaths_d	-.035 <sup>b</sup>	-.323	.748	-.034	.923	1.084
	AvgPL_d	-.089 <sup>b</sup>	-.623	.535	-.066	.518	1.930
	AvgGL_d	-.010 <sup>b</sup>	-.076	.940	-.008	.608	1.646

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	Tpaths_d	.876	
	TSpaths_d	.923	
	AvgPL_d	.518	
	AvgGL_d	.608	

a. Dependent Variable: PL\_TpoutN

b. Predictors in the Model: (Constant), GD\_d

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	GD_d
1	1	1.952	1.000	.02	.02
	2	.048	6.396	.98	.98

a. Dependent Variable: PL\_TpoutN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00734990090 1318	.01838853396 4753	.01098901098 9011	.00235889810 8682
Std. Predicted Value	-1.543	3.137	.000	1.000
Standard Error of Predicted Value	.001	.003	.001	.000
Adjusted Predicted Value	.00673496862 8734	.01906958967 4473	.01103314924 5749	.00238093357 8633
Residual	- .01470899023 1156	.01581254601 4786	.00000000000 0000	.00931998851 3564
Std. Residual	-1.569	1.687	.000	.994
Stud. Residual	-1.601	1.720	-.002	1.004
Deleted Residual	- .01529989484 6976	.01642747782 1708	- .00004413825 6738	.00950412506 9005

Stud. Deleted Residual	-1.615	1.739	-.002	1.008
Mahal. Distance	.000	9.840	.989	1.748
Cook's Distance	.000	.058	.010	.012
Centered Leverage Value	.000	.109	.011	.019

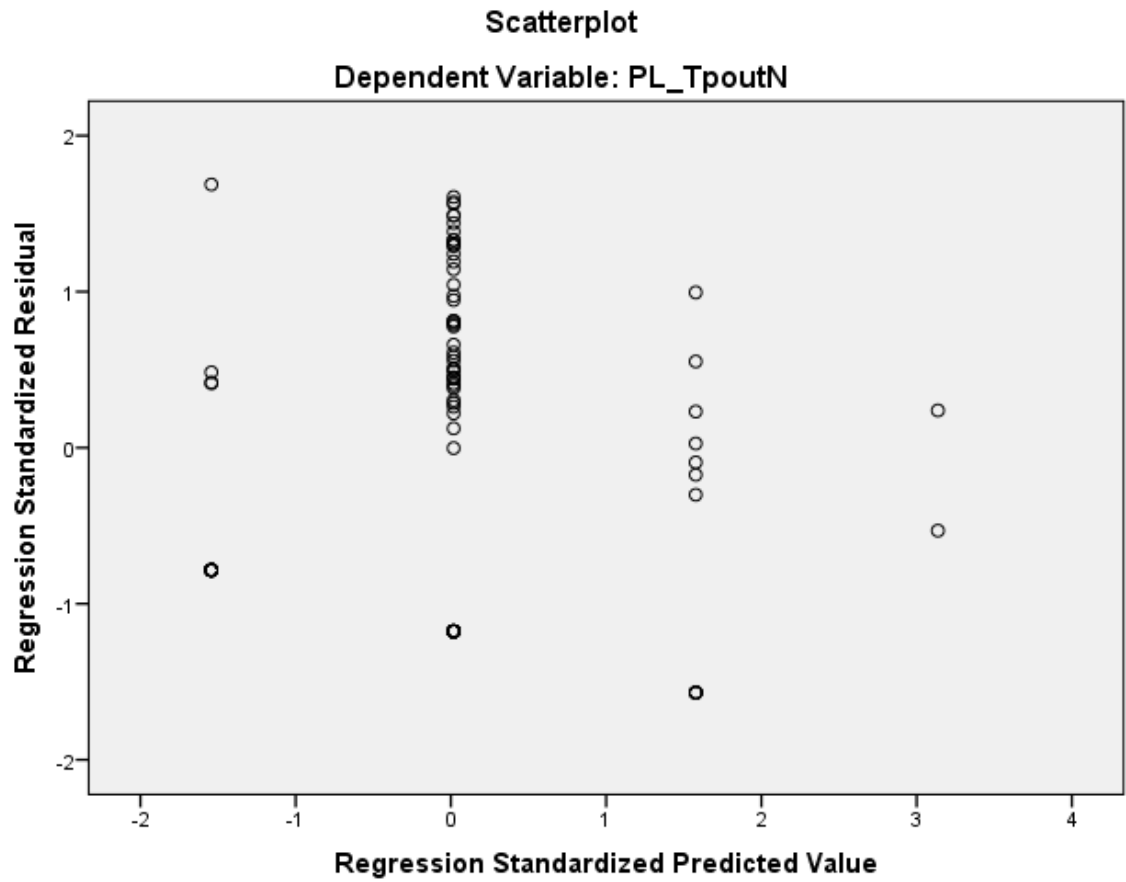
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_TpoutN



## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_TSpoutN

/METHOD=STEPWISE GD\_d Tpaths\_d TSpaths\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:39:01
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.	
		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_TSpoutN  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.20
	Elapsed Time		00:00:00.19
	Memory Required	5952 bytes	
	Additional Memory Required for Residual Plots	0 bytes	
Variables Created or Modified	COO_2	Cook's Distance	

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_TSpoutN

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.261 <sup>a</sup>	.068	.058	.01058948641 4098

a. Predictors: (Constant), GD\_d

b. Dependent Variable: PL\_TSpoutN

#### ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.001	1	.001	6.494	.013 <sup>b</sup>
	Residual	.010	89	.000		
	Total	.011	90			

a. Dependent Variable: PL\_TSpoutN

b. Predictors: (Constant), GD\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.002	.004		.595	.553
	GD_d	.803	.315	.261	2.548	.013

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000

a. Dependent Variable: PL\_TSpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	.126 <sup>b</sup>	1.159	.250	.123	.876	1.141
	TSpaths_d	.146 <sup>b</sup>	1.376	.172	.145	.923	1.084
	AvgPL_d	-.036 <sup>b</sup>	-.254	.800	-.027	.518	1.930
	AvgGL_d	.043 <sup>b</sup>	.324	.747	.034	.608	1.646

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	Tpaths_d	.876	
	TSpaths_d	.923	
	AvgPL_d	.518	
	AvgGL_d	.608	

a. Dependent Variable: PL\_TSpoutN

b. Predictors in the Model: (Constant), GD\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

		Index	(Constant)	GD_d
1	1	1.952	1.000	.02
	2	.048	6.396	.98

a. Dependent Variable: PL\_TSpoutN

# Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00660054944 4556	.01991221681 2372	.01098901098 9011	.00284463321 3705
Std. Predicted Value	-1.543	3.137	.000	1.000
Standard Error of Predicted Value	.001	.004	.001	.001
Adjusted Predicted Value	.00577389169 4844	.02263577096 1642	.01103515227 6220	.00295607381 7337
Residual	- .01991221681 2372	.02125691249 9666	.00000000000 0000	.01053049160 1787
Std. Residual	-1.880	2.007	.000	.994
Stud. Residual	-2.005	2.046	-.002	1.006
Deleted Residual	- .02263577096 1642	.02208356931 8056	- .00004614128 7209	.01078481188 4936
Stud. Deleted Residual	-2.040	2.084	-.001	1.011
Mahal. Distance	.000	9.840	.989	1.748

Cook's Distance	.000	.275	.012	.031
Centered Leverage Value	.000	.109	.011	.019

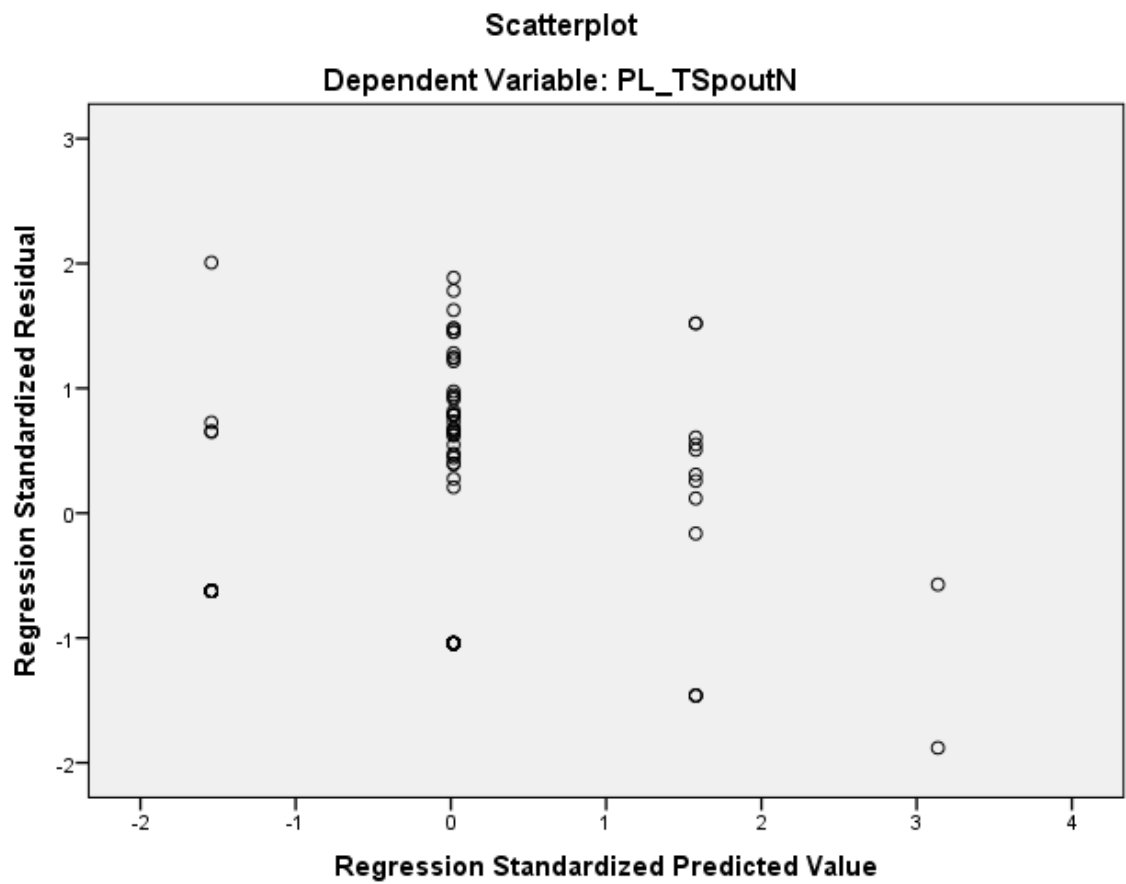
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_TSpoutN

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S\_pro

/METHOD=STEPWISE GD\_d Tpaths\_d TSpaths\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:39:15
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT S_pro
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.20
	Memory Required	6000 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or Modified	COO_3	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_pro

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.616 <sup>a</sup>	.380	.373	.01605624587 0202
2	.658 <sup>b</sup>	.433	.420	.01544022163 3686

a. Predictors: (Constant), AvgGL\_d

b. Predictors: (Constant), AvgGL\_d, AvgPL\_d

c. Dependent Variable: S\_pro

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.014	1	.014	54.518	.000 <sup>b</sup>
	Residual	.023	89	.000		
	Total	.037	90			
2	Regression	.016	2	.008	33.599	.000 <sup>c</sup>
	Residual	.021	88	.000		
	Total	.037	90			

a. Dependent Variable: S\_pro

b. Predictors: (Constant), AvgGL\_d

c. Predictors: (Constant), AvgGL\_d, AvgPL\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.080	.012		-6.428	.000

	AvgGL_d	8.248	1.117	.616	7.384	.000
2	(Constant)	-.093	.013		-7.269	.000
	AvgGL_d	14.315	2.370	1.070	6.039	.000
	AvgPL_d	-4.884	1.701	-.509	-2.871	.005

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_d	1.000	1.000
2	(Constant)		
	AvgGL_d	.205	4.869
	AvgPL_d	.205	4.869

a. Dependent Variable: S\_pro

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.057 <sup>b</sup>	-.533	.595	-.057	.608	1.646
	Tpaths_d	-.258 <sup>b</sup>	-2.543	.013	-.262	.640	1.562
	TSpaths_d	-.209 <sup>b</sup>	-2.089	.040	-.217	.671	1.489

	AvgPL_d	-.509 <sup>b</sup>	-2.871	.005	-.293	.205	4.869
2	GD_d	.066 <sup>c</sup>	.590	.556	.063	.518	1.931
	Tpaths_d	-.172 <sup>c</sup>	-1.601	.113	-.169	.546	1.832
	TSpaths_d	-.160 <sup>c</sup>	-1.613	.110	-.170	.646	1.549

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.608
	Tpaths_d	.640
	TSpaths_d	.671
	AvgPL_d	.205
2	GD_d	.175
	Tpaths_d	.175
	TSpaths_d	.197

a. Dependent Variable: S\_pro

b. Predictors in the Model: (Constant), AvgGL\_d

c. Predictors in the Model: (Constant), AvgGL\_d, AvgPL\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	AvgGL_d	AvgPL_d
1	1	1.991	1.000	.00	.00	
	2	.009	14.655	1.00	1.00	
2	1	2.979	1.000	.00	.00	.00
	2	.018	12.746	.52	.00	.15
	3	.002	34.917	.47	.99	.85

a. Dependent Variable: S\_pro

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00060853519 2441	.08773630857 4677	.01098901098 9011	.01334170218 0199
Std. Predicted Value	-.869	5.752	.000	1.000
Standard Error of Predicted Value	.002	.013	.002	.002
Adjusted Predicted Value	- .00189668266 1027	.09688001126 0509	.01120318697 5819	.01394396149 1938
Residual	- .04910053312 7785	.07844858616 5905	.00000000000 0000	.01526769977 6022
Std. Residual	-3.180	5.081	.000	.989
Stud. Residual	-3.388	5.352	-.005	1.031



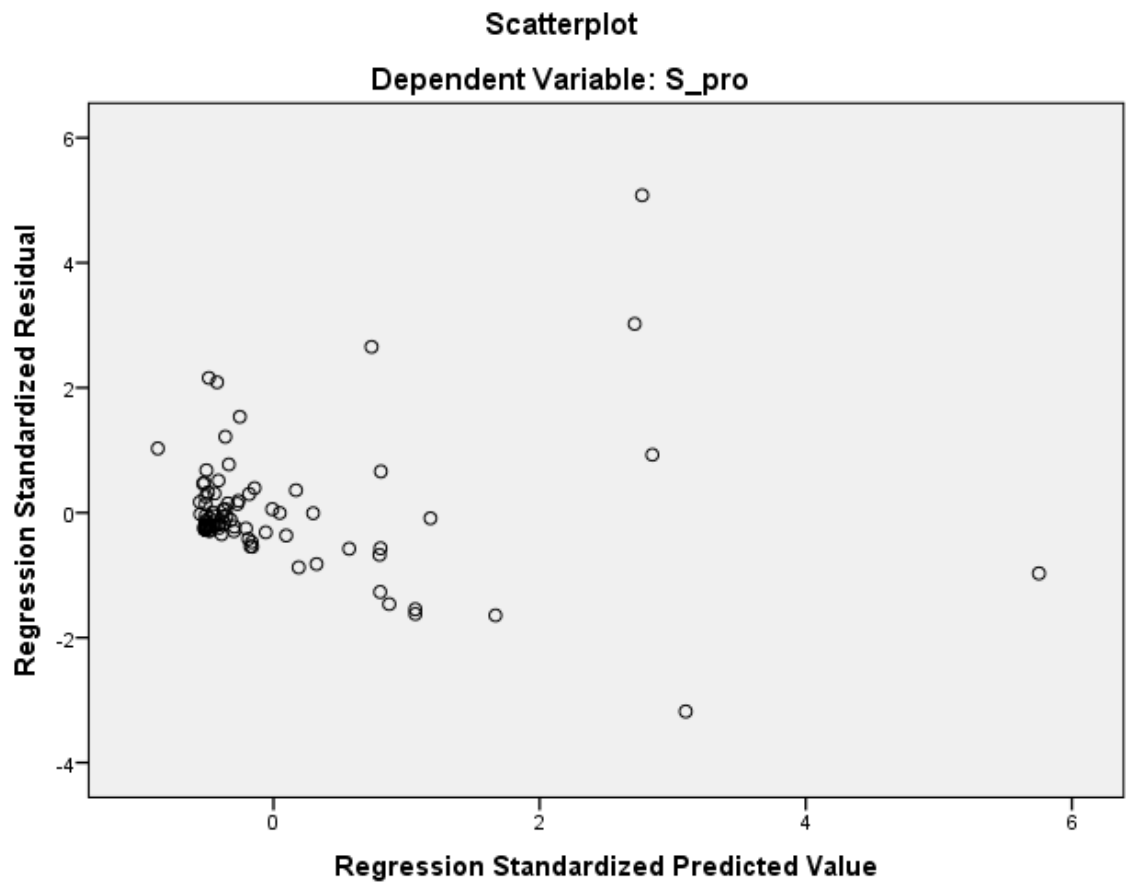
Deleted Residual	- .05572251975 5363	.08704087138 1760	- .00021417598 6808	.01669508990 7444
Stud. Deleted Residual	-3.612	6.479	.009	1.120
Mahal. Distance	.013	60.174	1.978	7.434
Cook's Distance	.000	1.046	.035	.136
Centered Leverage Value	.000	.669	.022	.083

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: S\_pro

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT R_pro

/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created	31-MAY-2015 10:39:34	
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT R_pro  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.17
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: R\_pro

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.615 <sup>a</sup>	.378	.371	.00143615429 5131
2	.646 <sup>b</sup>	.418	.404	.00139801764 5936

a. Predictors: (Constant), AvgGL\_d

b. Predictors: (Constant), AvgGL\_d, Tpaths\_d

c. Dependent Variable: R\_pro

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	54.193	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	31.556	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: R\_pro

b. Predictors: (Constant), AvgGL\_d

c. Predictors: (Constant), AvgGL\_d, Tpaths\_d

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.003	.001		2.622	.010
	AvgGL_d	.736	.100	.615	7.362	.000
2	(Constant)	.007	.002		3.472	.001
	AvgGL_d	.913	.122	.764	7.511	.000
	Tpaths_d	-.576	.237	-.247	-2.433	.017

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_d	1.000	1.000
2	(Constant)		
	AvgGL_d	.640	1.562
	Tpaths_d	.640	1.562

a. Dependent Variable: R\_pro

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.176 <sup>b</sup>	1.662	.100	.175	.608	1.646

	Tpaths_d	-.247 <sup>b</sup>	-2.433	.017	-.251	.640	1.562
	TSpaths_d	-.233 <sup>b</sup>	-2.339	.022	-.242	.671	1.489
	AvgPL_d	-.242 <sup>b</sup>	-1.316	.192	-.139	.205	4.869
2	GD_d	.167 <sup>c</sup>	1.612	.111	.170	.607	1.648
	TSpaths_d	.105 <sup>c</sup>	.207	.836	.022	.026	38.317
	AvgPL_d	-.087 <sup>c</sup>	-.445	.658	-.048	.175	5.710

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.608
	Tpaths_d	.640
	TSpaths_d	.671
	AvgPL_d	.205
2	GD_d	.443
	TSpaths_d	.025
	AvgPL_d	.175

a. Dependent Variable: R\_pro

b. Predictors in the Model: (Constant), AvgGL\_d

c. Predictors in the Model: (Constant), AvgGL\_d, Tpaths\_d



### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_d	Tpaths_d
1	1	1.991	1.000	.00	.00	
	2	.009	14.655	1.00	1.00	
2	1	2.988	1.000	.00	.00	.00
	2	.010	17.430	.16	.75	.02
	3	.002	38.807	.84	.25	.98

a. Dependent Variable: R\_pro

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00906164385 3784	.01770077086 9851	.01098901098 9011	.00117070586 1125
Std. Predicted Value	-1.646	5.733	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00951192807 4062	.01950948126 6141	.01102105152 8066	.00129340309 9308
Residual	- .00328813539 8179	.00369774200 9535	.00000000000 0000	.00138239684 6763
Std. Residual	-2.352	2.645	.000	.989

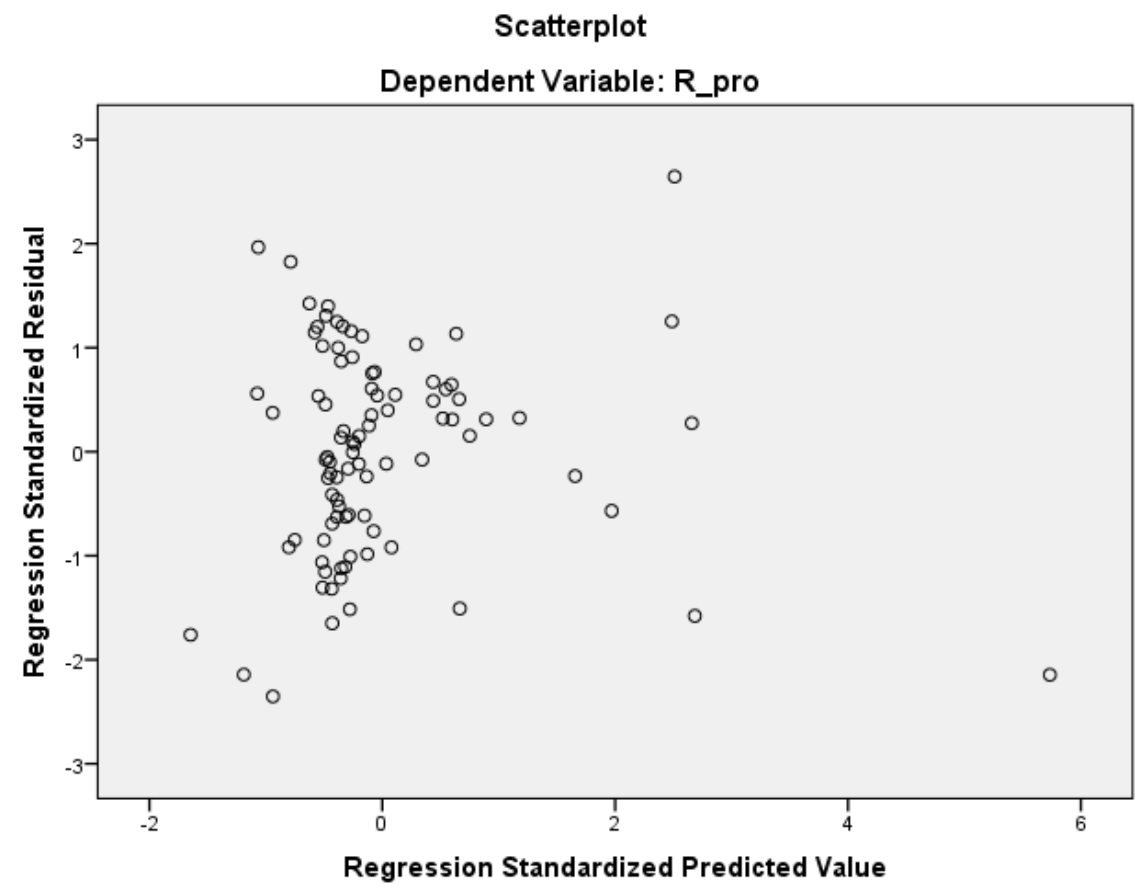
Stud. Residual	-2.715	2.759	-.010	1.029
Deleted Residual	-	-	-	-
	.00480619166	.00402457173	.00003204053	.00150837154
	0464	9137	9055	5012
Stud. Deleted Residual	-2.820	2.871	-.012	1.042
Mahal. Distance	.016	32.881	1.978	4.733
Cook's Distance	.000	1.483	.035	.165
Centered Leverage Value	.000	.365	.022	.053

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: R\_pro

Charts



REGRESSION

```

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT SMSP_d
/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:40:00
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT SMSP_d  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Memory Required	6080 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_5	Cook's Distance

### Warnings

No variables were entered into the equation.

### REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S\_pro

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

### Regression

### Notes

Output Created		31-MAY-2015 10:40:21
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT S_pro  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.20

	Elapsed Time	00:00:00.22
	Memory Required	6112 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_6	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_pro



**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.598 <sup>a</sup>	.358	.351	.01310449552 6383
2	.637 <sup>b</sup>	.405	.392	.01268228109 6546

a. Predictors: (Constant), AvgGL\_d

b. Predictors: (Constant), AvgGL\_d, Tpaths\_d

c. Dependent Variable: S\_pro

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.008	1	.008	49.035	.000 <sup>b</sup>
	Residual	.015	88	.000		
	Total	.024	89			
2	Regression	.010	2	.005	29.656	.000 <sup>c</sup>
	Residual	.014	87	.000		
	Total	.024	89			

a. Dependent Variable: S\_pro

b. Predictors: (Constant), AvgGL\_d

c. Predictors: (Constant), AvgGL\_d, Tpaths\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.063	.010		-6.009	.000
	AvgGL_d	6.607	.944	.598	7.003	.000
2	(Constant)	-.020	.019		-1.045	.299
	AvgGL_d	8.400	1.138	.761	7.379	.000
	Tpaths_d	-5.677	2.152	-.272	-2.638	.010

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_d	1.000	1.000
2	(Constant)		
	AvgGL_d	.643	1.554
	Tpaths_d	.643	1.554

a. Dependent Variable: S\_pro

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.089 <sup>b</sup>	.790	.431	.084	.580	1.723
	Tpaths_d	-.272 <sup>b</sup>	-2.638	.010	-.272	.643	1.554
	TSpaths_d	-.234 <sup>b</sup>	-2.312	.023	-.241	.680	1.471
	AvgPL_d	-.445 <sup>b</sup>	-2.431	.017	-.252	.206	4.858
2	GD_d	.073 <sup>c</sup>	.672	.503	.072	.579	1.728
	TSpaths_d	.674 <sup>c</sup>	1.315	.192	.140	.026	38.777
	AvgPL_d	-.308 <sup>c</sup>	-1.576	.119	-.168	.176	5.669

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.580	
	Tpaths_d	.643	
	TSpaths_d	.680	
	AvgPL_d	.206	
2	GD_d	.425	

TSpaths_d	.024
AvgPL_d	.176

a. Dependent Variable: S\_pro

b. Predictors in the Model: (Constant), AvgGL\_d

c. Predictors in the Model: (Constant), AvgGL\_d, Tpaths\_d

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_d	Tpaths_d
1	1	1.991	1.000	.00	.00	
	2	.009	15.023	1.00	1.00	
2	1	2.989	1.000	.00	.00	.00
	2	.009	17.896	.17	.76	.02
	3	.002	38.604	.83	.24	.98

a. Dependent Variable: S\_pro

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	- .00846059992 9094	.07123901695 0130	.00970672221 7898	.01035314767 3697
Std. Predicted Value	-1.755	5.943	.000	1.000
Standard Error of Predicted Value	.001	.008	.002	.001
Adjusted Predicted Value	- .01002065092 3252	.07020439952 6119	.00976023622 2064	.01042681471 9292
Residual	- .03523255884 6474	.05732298269 8679	.00000000000 0000	.01253897388 4880
Std. Residual	-2.778	4.520	.000	.989
Stud. Residual	-2.937	4.730	-.002	1.021
Deleted Residual	- .03939153254 0321	.06277461349 9641	- .00005351400 4166	.01339099981 0385
Stud. Deleted Residual	-3.077	5.456	.009	1.082
Mahal. Distance	.013	35.329	1.978	4.936
Cook's Distance	.000	.709	.024	.093
Centered Leverage Value	.000	.397	.022	.055

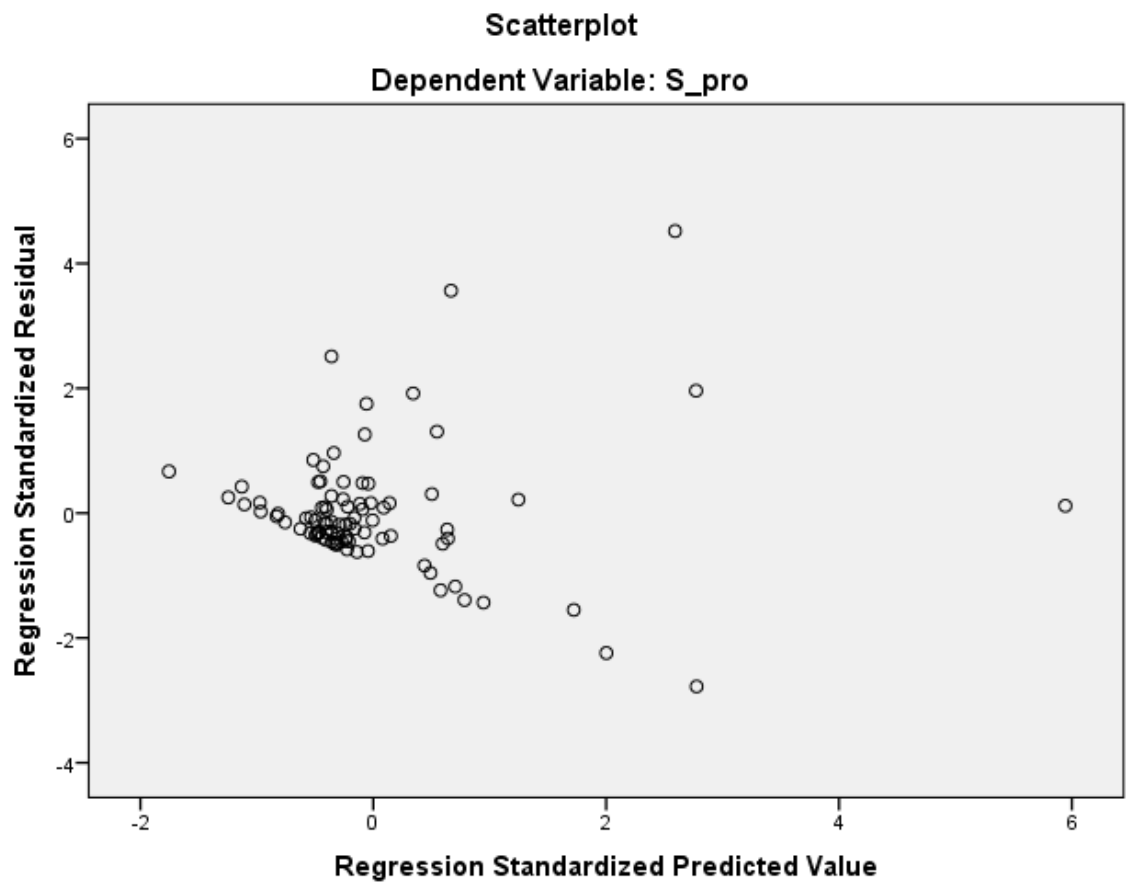
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90

Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: S\_pro

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT R\_pro

/METHOD=STEPWISE GD\_d Tpaths\_d TSpats\_d AvgPL\_d AvgGL\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:41:00
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	89
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.



Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT R_pro  /METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.22
	Memory Required	6160 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: R\_pro

#### Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
-------	---	----------	-------------------	----------------------------

1	.559 <sup>a</sup>	.312	.304	.00136671616 8920
2	.611 <sup>b</sup>	.373	.359	.00131225601 6853
3	.638 <sup>c</sup>	.407	.386	.00128377481 7505

a. Predictors: (Constant), AvgGL\_d

b. Predictors: (Constant), AvgGL\_d, Tpaths\_d

c. Predictors: (Constant), AvgGL\_d, Tpaths\_d, GD\_d

d. Dependent Variable: R\_pro

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	39.501	.000 <sup>b</sup>
	Residual	.000	87	.000		
	Total	.000	88			
2	Regression	.000	2	.000	25.610	.000 <sup>c</sup>
	Residual	.000	86	.000		
	Total	.000	88			
3	Regression	.000	3	.000	19.458	.000 <sup>d</sup>
	Residual	.000	85	.000		

Total	.000	88			
-------	------	----	--	--	--

a. Dependent Variable: R\_pro

b. Predictors: (Constant), AvgGL\_d

c. Predictors: (Constant), AvgGL\_d, Tpaths\_d

d. Predictors: (Constant), AvgGL\_d, Tpaths\_d, GD\_d

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.002	.001		1.863	.066
	AvgGL_d	.772	.123	.559	6.285	.000
2	(Constant)	.007	.002		3.463	.001
	AvgGL_d	1.038	.150	.752	6.941	.000
	Tpaths_d	-.668	.231	-.313	-2.893	.005
3	(Constant)	.007	.002		3.795	.000
	AvgGL_d	.833	.173	.603	4.809	.000
	Tpaths_d	-.627	.226	-.294	-2.767	.007
	GD_d	.111	.051	.230	2.204	.030

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_d	1.000	1.000
2	(Constant)		
	AvgGL_d	.622	1.609
	Tpaths_d	.622	1.609
3	(Constant)		
	AvgGL_d	.443	2.257
	Tpaths_d	.617	1.620
	GD_d	.643	1.555

a. Dependent Variable: R\_pro

#### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.253 <sup>b</sup>	2.350	.021	.246	.647	1.545
	Tpaths_d	-.313 <sup>b</sup>	-2.893	.005	-.298	.622	1.609
	TSpaths_d	-.289 <sup>b</sup>	-2.774	.007	-.287	.675	1.481
	AvgPL_d	-.264 <sup>b</sup>	-1.435	.155	-.153	.231	4.332

2	GD_d	.230 <sup>c</sup>	2.204	.030	.233	.643	1.555
	TSpaths_d	.151 <sup>c</sup>	.281	.780	.030	.025	39.339
	AvgPL_d	-.107 <sup>c</sup>	-.567	.572	-.061	.206	4.853
3	TSpaths_d	.779 <sup>d</sup>	1.354	.179	.146	.021	47.918
	AvgPL_d	-.325 <sup>d</sup>	-1.629	.107	-.175	.172	5.806

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.647
	Tpaths_d	.622
	TSpaths_d	.675
	AvgPL_d	.231
2	GD_d	.443
	TSpaths_d	.023
	AvgPL_d	.206
3	TSpaths_d	.020
	AvgPL_d	.172

a. Dependent Variable: R\_pro

b. Predictors in the Model: (Constant), AvgGL\_d

c. Predictors in the Model: (Constant), AvgGL\_d, Tpaths\_d

d. Predictors in the Model: (Constant), AvgGL\_d, Tpaths\_d, GD\_d

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_d	Tpaths_d
1	1	1.994	1.000	.00	.00	
	2	.006	18.452	1.00	1.00	
2	1	2.992	1.000	.00	.00	.00
	2	.006	22.362	.31	.72	.01
	3	.002	39.045	.69	.28	.99
3	1	3.936	1.000	.00	.00	.00
	2	.057	8.275	.01	.00	.01
	3	.004	29.593	.38	.71	.00
	4	.002	45.062	.61	.29	.99

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions
		GD_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.72
	3	.26
	4	.02

a. Dependent Variable: R\_pro

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00842024572 1936	.01434807945 0428	.01087270568 8675	.00104559070 1897
Std. Predicted Value	-2.346	3.324	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00884680449 9626	.01486724335 7003	.01089344800 8821	.00107153956 8207
Residual	- .00271970033 6456	.00332924351 0962	.00000000000 0000	.00126170254 5062
Std. Residual	-2.119	2.593	.000	.983
Stud. Residual	-2.184	2.693	-.007	1.019
Deleted Residual	- .00328905461 3560	.00358996982 6862	- .00002074232 0146	.00136148574 8178



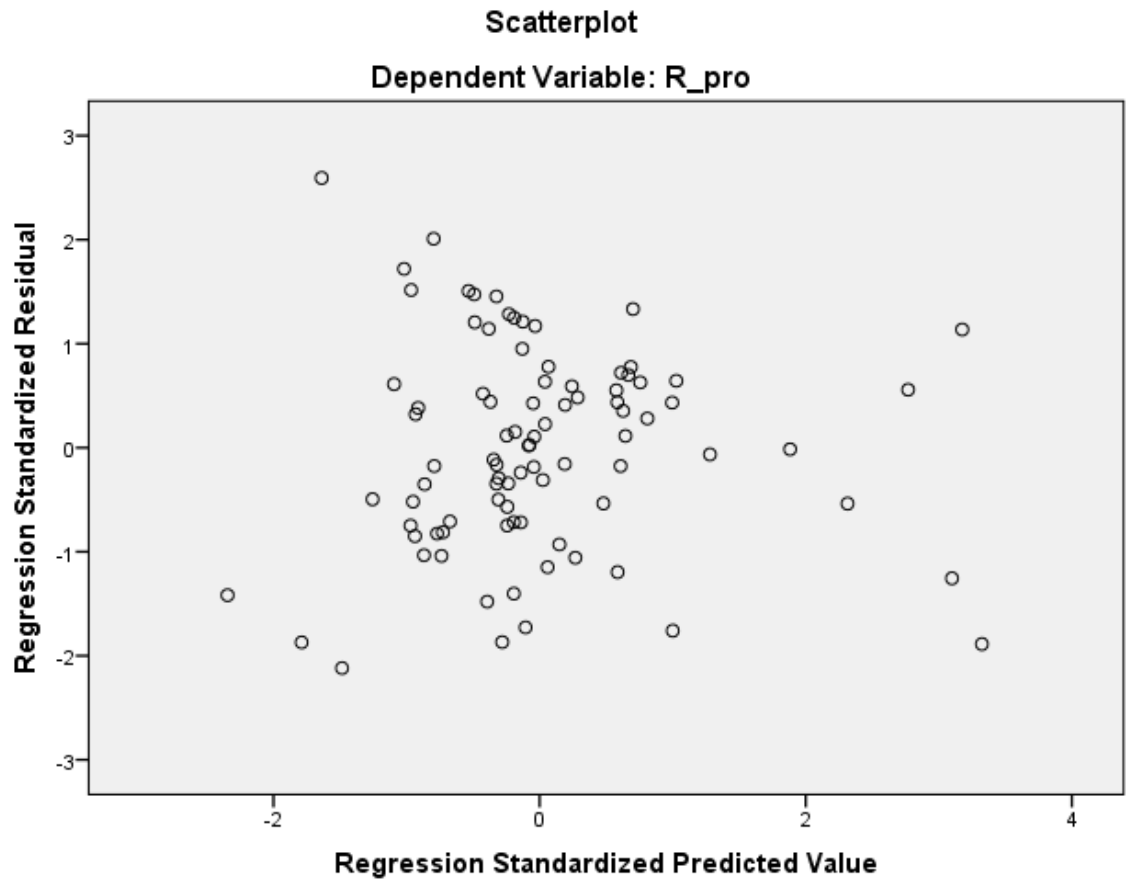
Stud. Deleted Residual	-2.234	2.799	-.008	1.030
Mahal. Distance	.086	26.596	2.966	4.383
Cook's Distance	.000	.514	.021	.064
Centered Leverage Value	.001	.302	.034	.050

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	89
Std. Predicted Value	89
Standard Error of Predicted Value	89
Adjusted Predicted Value	89
Residual	89
Std. Residual	89
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	89
Cook's Distance	89
Centered Leverage Value	89

a. Dependent Variable: R\_pro

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT GD\_d

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:34:06
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.	
		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT GD_d  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.20
	Elapsed Time		00:00:00.21
	Memory Required	5920 bytes	
	Additional Memory Required for Residual Plots	0 bytes	
Variables Created or Modified	COO_1	Cook's Distance	

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: GD\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.493 <sup>a</sup>	.243	.234	.00309959891 3696

a. Predictors: (Constant), R\_pro

b. Dependent Variable: GD\_d

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.000	1	.000	28.518	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: GD\_d

b. Predictors: (Constant), R\_pro

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.000	.002		.202	.841
	R_pro	.963	.180	.493	5.340	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_pro	1.000	1.000

a. Dependent Variable: GD\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.069 <sup>b</sup>	.687	.494	.073	.857	1.167
	PL_TSpoutN	.020 <sup>b</sup>	.188	.852	.020	.751	1.331
	S_pro	.064 <sup>b</sup>	.534	.595	.057	.596	1.678
	SMSP_d	.128 <sup>b</sup>	1.394	.167	.147	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN	.857	
	PL_TSpoutN	.751	
	S_pro	.596	
	SMSP_d	.995	

a. Dependent Variable: GD\_d

b. Predictors in the Model: (Constant), R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition	Variance Proportions
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		Index	(Constant)	R_pro
1	1	1.987	1.000	.01
	2	.013	12.281	.99

a. Dependent Variable: GD\_d

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00676250318 0653	.01738146878 7789	.01098901098 9011	.00174479393 9312
Std. Predicted Value	-2.422	3.664	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00686457147 8218	.01858870685 1006	.01100183916 1782	.00178127580 3398
Residual	- .00690962513 9087	.00965444929 8978	.00000000000 0000	.00308233081 8814
Std. Residual	-2.229	3.115	.000	.994
Stud. Residual	-2.250	3.144	-.002	1.009
Deleted Residual	- .00753898313 2690	.00983869004 9946	- .00001282817 2771	.00317712137 3493
Stud. Deleted Residual	-2.304	3.316	.001	1.026
Mahal. Distance	.000	13.423	.989	1.871



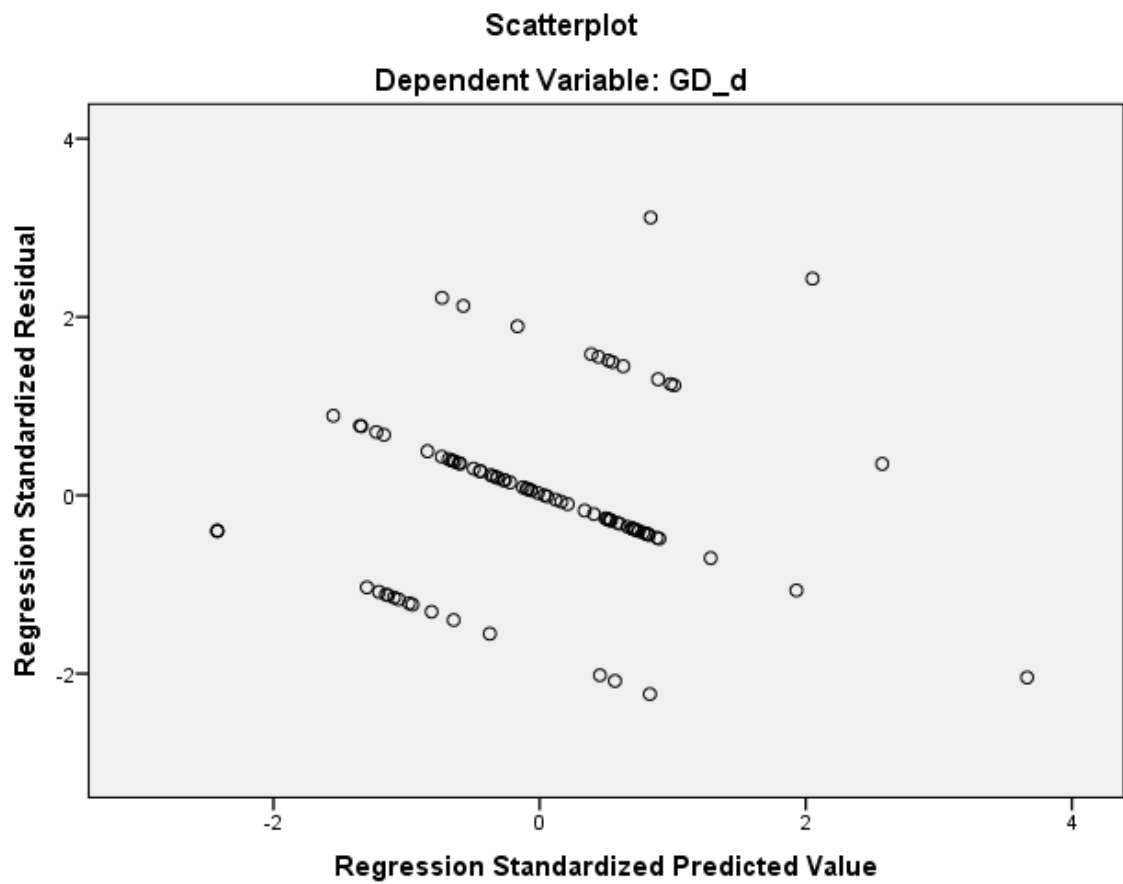
Cook's Distance	.000	.474	.016	.054
Centered Leverage Value	.000	.149	.011	.021

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: GD\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Tpaths\_d

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:34:22
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		<p>REGRESSION</p> <p>/MISSING LISTWISE</p> <p>/STATISTICS COEFF OUTS R ANOVA COLLIN TOL</p> <p>/CRITERIA=PIN(.05) POUT(.10)</p> <p>/NOORIGIN</p> <p>/DEPENDENT Tpaths_d</p> <p>/METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.19
	Memory Required	5952 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_2	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: Tpaths\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.211 <sup>a</sup>	.044	.034	.000765092460294

a. Predictors: (Constant), R\_pro

b. Dependent Variable: Tpaths\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	4.132	.045 <sup>b</sup>
	Residual	.000	89	.000		

Total	.000	90			
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a. Dependent Variable: Tpaths\_d

b. Predictors: (Constant), R\_pro

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.010	.000		20.160	.000
R_pro	.090	.045	.211	2.033	.045

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
R_pro	1.000	1.000

a. Dependent Variable: Tpaths\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	-.043 <sup>b</sup>	-.382	.703	-.041	.857	1.167
	PL_TSpoutN	.130 <sup>b</sup>	1.086	.281	.115	.751	1.331
	S_pro	.119 <sup>b</sup>	.886	.378	.094	.596	1.678
	SMSP_d	.017 <sup>b</sup>	.161	.872	.017	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN	.857	
	PL_TSpoutN	.751	
	S_pro	.596	
	SMSP_d	.995	

a. Dependent Variable: Tpaths\_d

b. Predictors in the Model: (Constant), R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_pro

1	1	1.987	1.000	.01	.01
	2	.013	12.281	.99	.99

a. Dependent Variable: Tpaths\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01059190183 8779	.01158962585 0320	.01098901098 9011	.00016393517 6231
Std. Predicted Value	-2.422	3.664	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.01039958652 1089	.01156456209 7192	.01098438363 7565	.00017111466 0268
Residual	- .00154499046 0388	.00404917867 8542	.00000000000 0000	.00076083007 3590
Std. Residual	-2.019	5.292	.000	.994
Stud. Residual	-2.031	5.338	.003	1.008
Deleted Residual	- .00156262039 6726	.00411904463 5445	.000000462735 1446	.00078248507 1216
Stud. Deleted Residual	-2.068	6.437	.019	1.087
Mahal. Distance	.000	13.423	.989	1.871
Cook's Distance	.000	.415	.014	.053



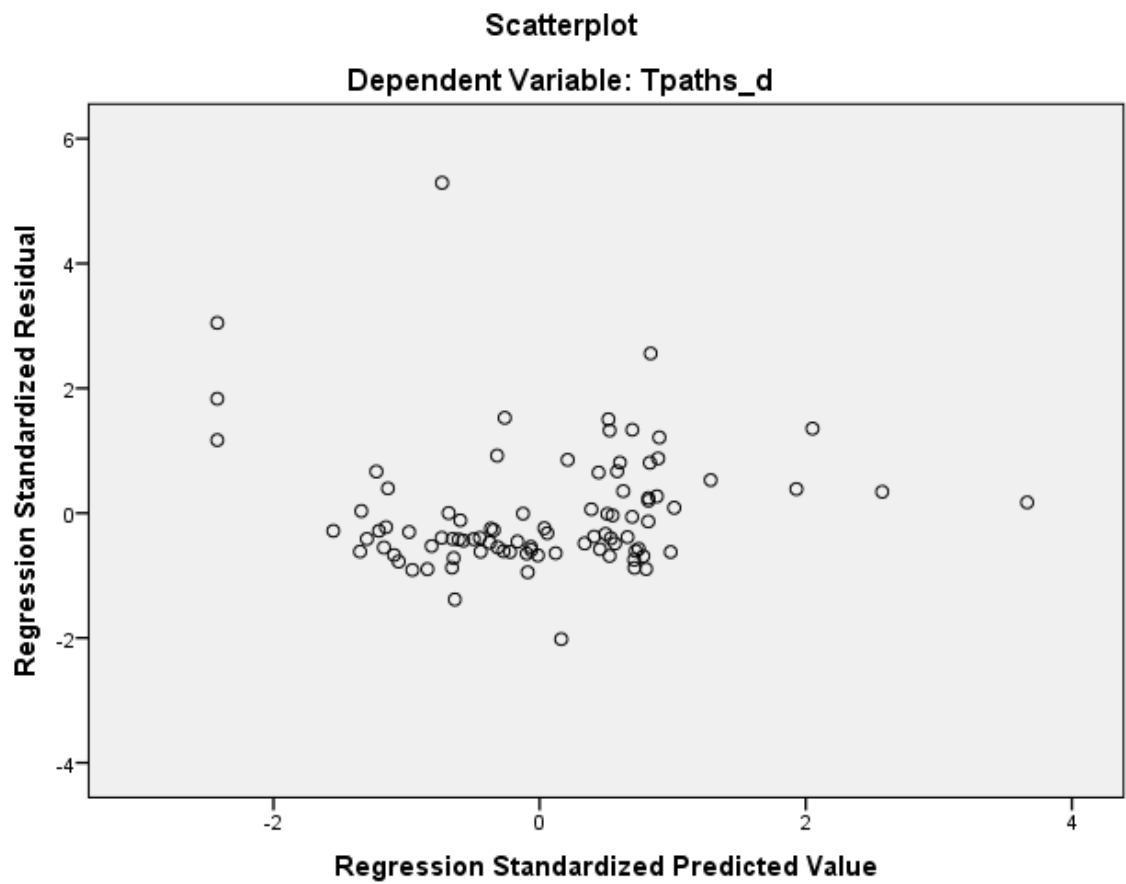
Centered Leverage Value	.000	.149	.011	.021
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#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: Tpaths\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT TSpaths\_d

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:34:39
Comments		
Input	Active Dataset	DataSet6
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT TSpaths_d
		/METHOD=STEPWISE
		PL_TpoutN PL_TSpoutN S_pro
		R_pro SMSP_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.22
	Memory Required	6000 bytes
	Additional Memory	
	Required for Residual	0 bytes
Variables Created or Modified	Plots	
	COO_3	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	S_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: TSpats\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.213 <sup>a</sup>	.045	.035	.000701184937752

a. Predictors: (Constant), S\_pro

b. Dependent Variable: TSpats\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	4.230	.043 <sup>b</sup>
	Residual	.000	89	.000		

Total	.000	90			
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a. Dependent Variable: TSpaths\_d

b. Predictors: (Constant), S\_pro

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.011	.000		130.289	.000
S_pro	.007	.004	.213	2.057	.043

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
S_pro	1.000	1.000

a. Dependent Variable: TSpaths\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.003 <sup>b</sup>	.029	.977	.003	.976	1.025
	PL_TSpoutN	.175 <sup>b</sup>	1.675	.098	.176	.968	1.033
	R_pro	.102 <sup>b</sup>	.760	.449	.081	.596	1.678
	SMSP_d	-.008 <sup>b</sup>	-.073	.942	-.008	1.000	1.000

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN	.976	
	PL_TSpoutN	.968	
	R_pro	.596	
	SMSP_d	1.000	

a. Dependent Variable: TSpats\_d

b. Predictors in the Model: (Constant), S\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	S_pro

1	1	1.479	1.000	.26	.26
	2	.521	1.684	.74	.74

a. Dependent Variable: TSpaths\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01090661901 9806	.01185428537 4284	.01098901098 9011	.00015202013 5790
Std. Predicted Value	-.542	5.692	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.01085730455 8158	.01189814880 4903	.01098765594 4261	.00015039452 1428
Residual	- .00144021224 6962	.00341581902 4667	.00000000000 0000	.00069727858 4584
Std. Residual	-2.054	4.871	.000	.994
Stud. Residual	-2.067	4.907	.001	1.002
Deleted Residual	- .00145838398 0207	.00346519192 6807	.000000135504 4750	.00070859291 8311
Stud. Deleted Residual	-2.106	5.712	.013	1.056
Mahal. Distance	.000	32.397	.989	3.973
Cook's Distance	.000	.174	.008	.022



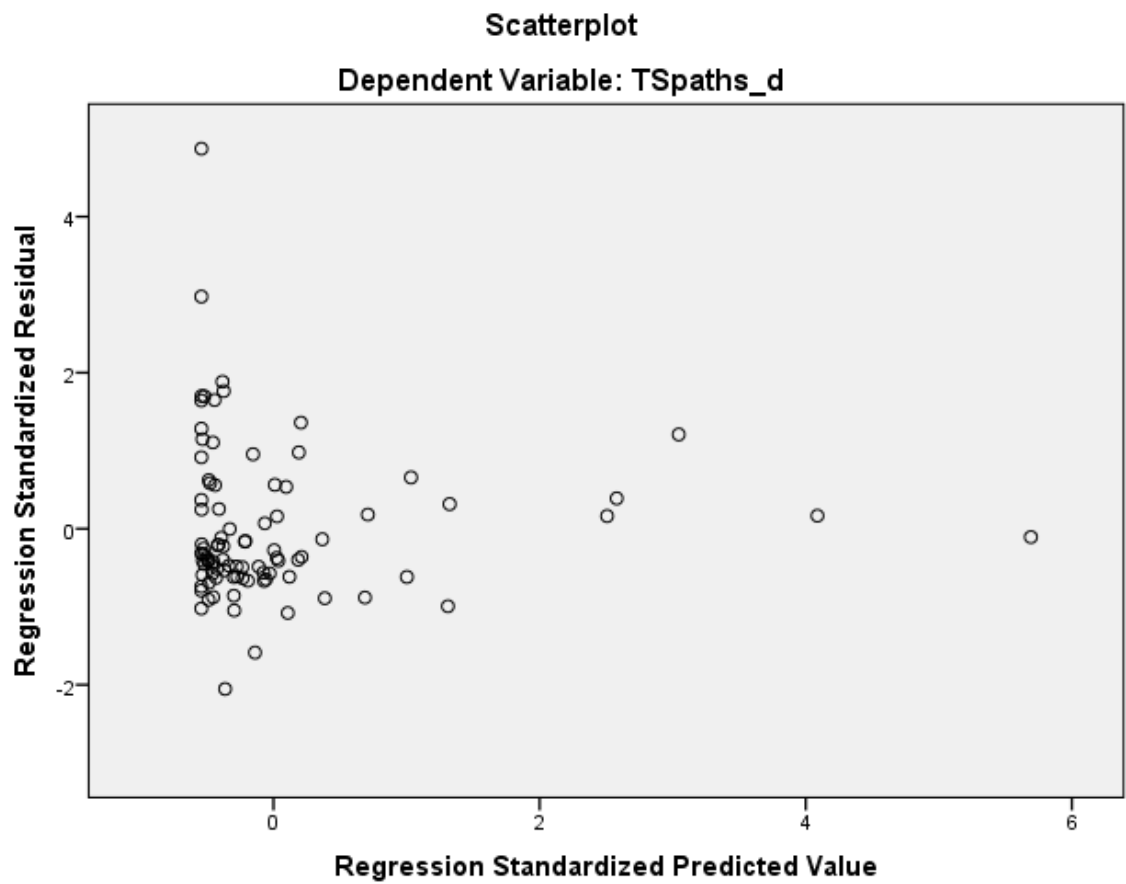
Centered Leverage Value	.000	.360	.011	.044
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# Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: TSpaths\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgPL\_d

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:34:55
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT AvgPL_d
		/METHOD=STEPWISE
		PL_TpoutN PL_TSpoutN S_pro
		R_pro SMSP_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Memory Required	6032 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_4	
Modified		Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: AvgPL\_d

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.499 <sup>a</sup>	.249	.240	.00184024195 9726

a. Predictors: (Constant), R\_pro

b. Dependent Variable: AvgPL\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	29.471	.000 <sup>b</sup>
	Residual	.000	89	.000		

Total	.000	90			
-------	------	----	--	--	--

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), R\_pro

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.005	.001		3.858	.000
R_pro	.581	.107	.499	5.429	.000

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
R_pro	1.000	1.000

a. Dependent Variable: AvgPL\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	-.076 <sup>b</sup>	-.759	.450	-.081	.857	1.167
	PL_TSpoutN	-.115 <sup>b</sup>	-1.088	.280	-.115	.751	1.331
	S_pro	.215 <sup>b</sup>	1.828	.071	.191	.596	1.678
	SMSP_d	.089 <sup>b</sup>	.966	.337	.102	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN	.857	
	PL_TSpoutN	.751	
	S_pro	.596	
	SMSP_d	.995	

a. Dependent Variable: AvgPL\_d

b. Predictors in the Model: (Constant), R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_pro

1	1	1.987	1.000	.01	.01
	2	.013	12.281	.99	.99

a. Dependent Variable: AvgPL\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00843812804 6691	.01484713982 7907	.01098901098 9011	.00105305957 7817
Std. Predicted Value	-2.422	3.664	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00832795072 3469	.01496845018 1186	.01098181531 4750	.00105789182 7832
Residual	- .00208731647 5809	.01091324817 3892	.00000000000 0000	.00182998983 5612
Std. Residual	-1.134	5.930	.000	.994
Stud. Residual	-1.145	5.987	.002	1.007
Deleted Residual	- .00212690862 8270	.01112151239 0673	.00000719567 4261	.00187591766 9611
Stud. Deleted Residual	-1.147	7.703	.031	1.164
Mahal. Distance	.000	13.423	.989	1.871
Cook's Distance	.000	.370	.013	.055



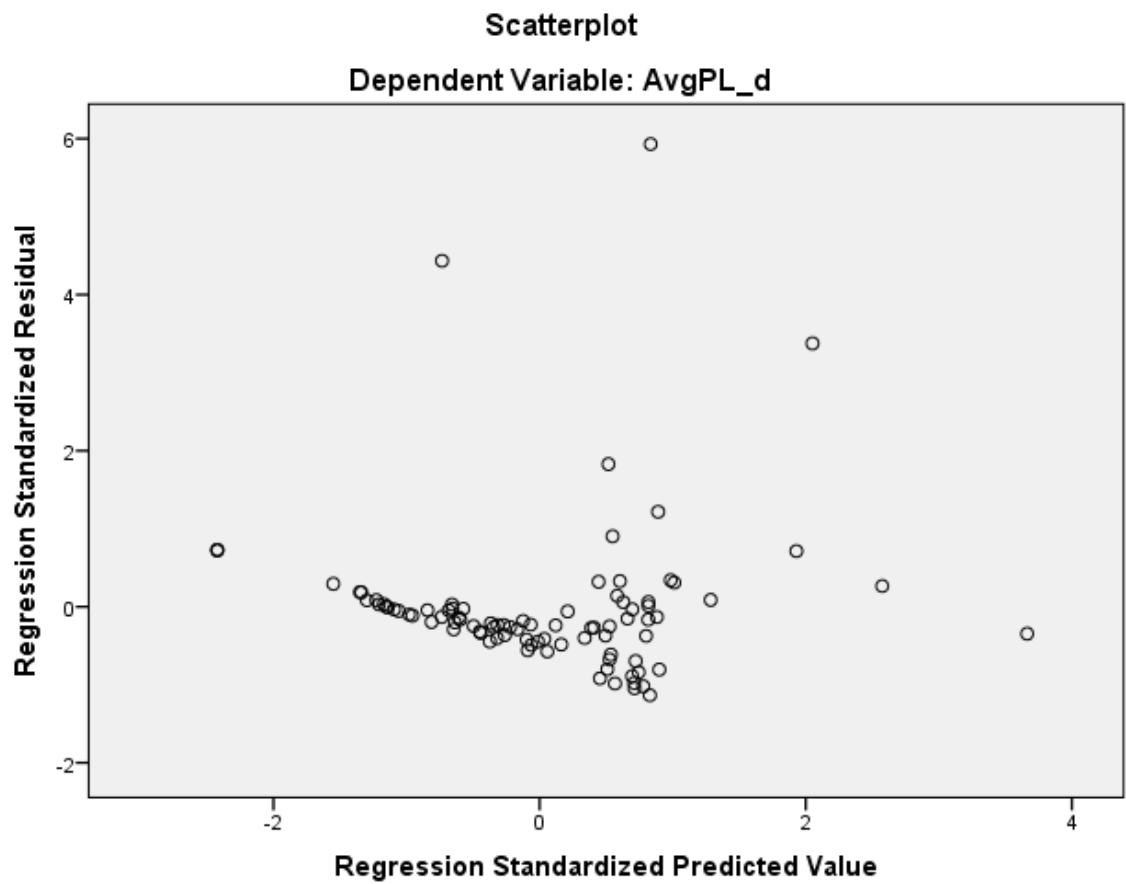
Centered Leverage Value	.000	.149	.011	.021
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# Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: AvgPL\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgGL\_d

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:35:30
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgGL_d  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.19
	Memory Required	6080 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_5	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	S_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgGL\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.616 <sup>a</sup>	.380	.373	.00119979233 9278
2	.681 <sup>b</sup>	.464	.451	.00112211335 8082

a. Predictors: (Constant), S\_pro

b. Predictors: (Constant), S\_pro, R\_pro

c. Dependent Variable: AvgGL\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	54.518	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	38.038	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: AvgGL\_d

b. Predictors: (Constant), S\_pro

c. Predictors: (Constant), S\_pro, R\_pro

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.010	.000		73.186	.000

	S_pro	.046	.006	.616	7.384	.000
2	(Constant)	.007	.001		8.156	.000
	S_pro	.028	.008	.378	3.739	.000
	R_pro	.314	.085	.375	3.708	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	S_pro	1.000	1.000
2	(Constant)		
	S_pro	.596	1.678
	R_pro	.596	1.678

a. Dependent Variable: AvgGL\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.053 <sup>b</sup>	.625	.534	.066	.976	1.025
	PL_TSpoutN	.082 <sup>b</sup>	.964	.338	.102	.968	1.033
	R_pro	.375 <sup>b</sup>	3.708	.000	.368	.596	1.678

	SMSP_d	.016 <sup>b</sup>	.190	.850	.020	1.000	1.000
2	PL_TpoutN	-.063 <sup>c</sup>	-.739	.462	-.079	.845	1.184
	PL_TSpoutN	-.091 <sup>c</sup>	-.985	.327	-.105	.719	1.391
	SMSP_d	-.009 <sup>c</sup>	-.117	.907	-.013	.992	1.008

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.976
	PL_TSpoutN	.968
	R_pro	.596
	SMSP_d	1.000
2	PL_TpoutN	.516
	PL_TSpoutN	.443
	SMSP_d	.592

a. Dependent Variable: AvgGL\_d

b. Predictors in the Model: (Constant), S\_pro

c. Predictors in the Model: (Constant), S\_pro, R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition	Variance Proportions
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			Index	(Constant)	S_pro	R_pro
1	1	1.479	1.000	.26	.26	
	2	.521	1.684	.74	.74	
2	1	2.380	1.000	.00	.04	.00
	2	.612	1.972	.00	.58	.00
	3	.008	16.973	.99	.38	1.00

a. Dependent Variable: AvgGL\_d

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00930256024 0030	.01633042097 0917	.01098901098 9011	.00103166516 0230
Std. Predicted Value	-1.635	5.177	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00921927858 1440	.01730978302 6576	.01099022436 8899	.00107987418 2518
Residual	- .00166045443 6205	.00530787929 8925	.00000000000 0000	.00110957538 5141
Std. Residual	-1.480	4.730	.000	.989
Stud. Residual	-1.866	5.026	.000	1.023

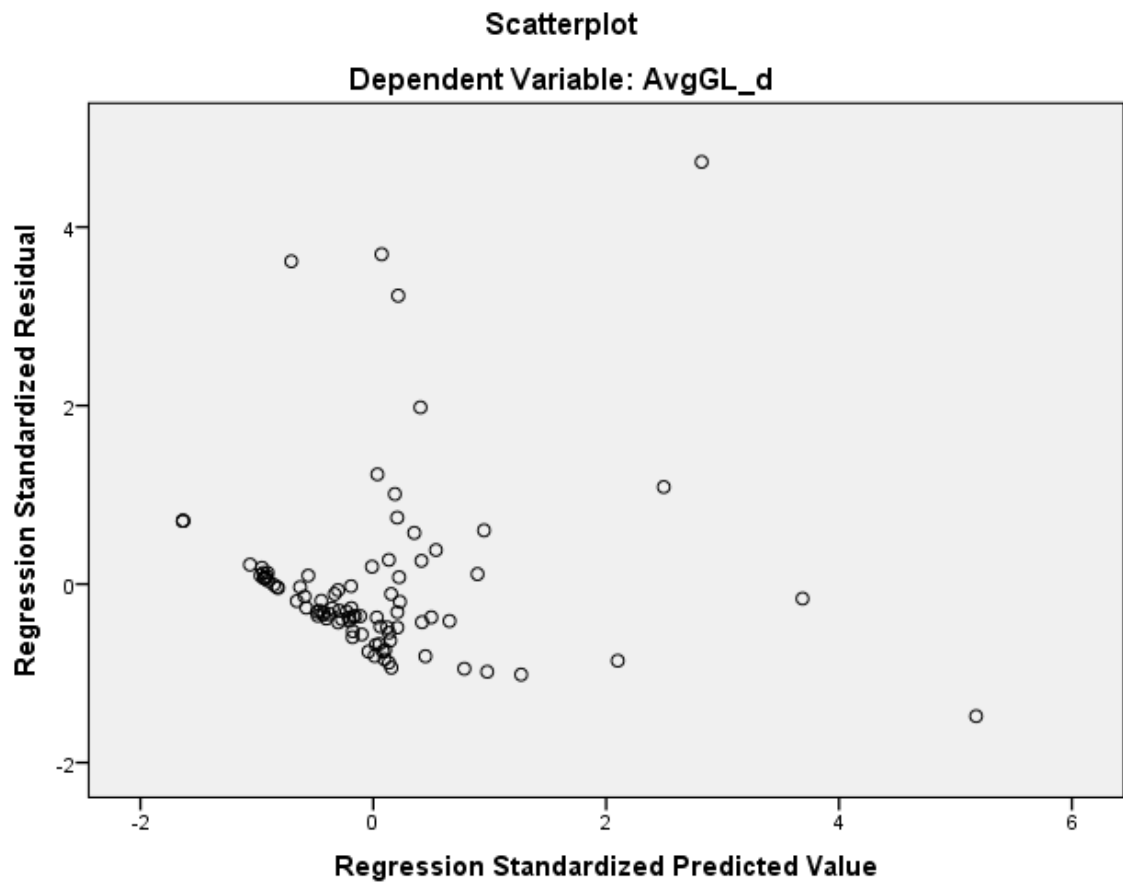
Deleted Residual	- .00263981660 8280	.00599283119 6636	- .00000121337 9888	.00119128637 4152
Stud. Deleted Residual	-1.893	5.919	.019	1.106
Mahal. Distance	.002	32.401	1.978	4.024
Cook's Distance	.000	1.087	.027	.134
Centered Leverage Value	.000	.360	.022	.045

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: AvgGL\_d

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgGL_d

/METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:35:59
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgGL_d  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.17
	Memory Required	6112 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_6	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	S_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgGL\_d

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.614 <sup>a</sup>	.377	.370	.00098975392 9053
2	.655 <sup>b</sup>	.429	.416	.00095288402 5792

a. Predictors: (Constant), R\_pro

b. Predictors: (Constant), R\_pro, S\_pro

c. Dependent Variable: AvgGL\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	53.203	.000 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			
2	Regression	.000	2	.000	32.671	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.000	89			

a. Dependent Variable: AvgGL\_d

b. Predictors: (Constant), R\_pro

c. Predictors: (Constant), R\_pro, S\_pro

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	.006	.001		9.454	.000
	R_pro	.430	.059	.614	7.294	.000
2	(Constant)	.007	.001		9.758	.000
	R_pro	.306	.072	.437	4.267	.000
	S_pro	.019	.007	.289	2.818	.006

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_pro	1.000	1.000
2	(Constant)		
	R_pro	.625	1.599
	S_pro	.625	1.599

a. Dependent Variable: AvgGL\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	-.137 <sup>b</sup>	-1.525	.131	-.161	.866	1.155



	PL_TSpoutN	-.031 <sup>b</sup>	-.309	.758	-.033	.711	1.407
	S_pro	.289 <sup>b</sup>	2.818	.006	.289	.625	1.599
	SMSP_d	-.012 <sup>b</sup>	-.143	.886	-.015	.994	1.006
2	PL_TpoutN	-.107 <sup>c</sup>	-1.221	.225	-.131	.851	1.175
	PL_TSpoutN	.011 <sup>c</sup>	.113	.911	.012	.694	1.441
	SMSP_d	-.002 <sup>c</sup>	-.029	.977	-.003	.992	1.008

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.866
	PL_TSpoutN	.711
	S_pro	.625
	SMSP_d	.994
2	PL_TpoutN	.541
	PL_TSpoutN	.457
	SMSP_d	.621

a. Dependent Variable: AvgGL\_d

b. Predictors in the Model: (Constant), R\_pro

c. Predictors in the Model: (Constant), R\_pro, S\_pro

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_pro	S_pro
1	1	1.987	1.000	.01	.01	
	2	.013	12.463	.99	.99	
2	1	2.371	1.000	.00	.00	.04
	2	.620	1.955	.00	.00	.61
	3	.008	16.809	.99	1.00	.35

a. Dependent Variable: AvgGL\_d

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00937327090 6508	.01510969549 4175	.01089771032 3078	.00081646606 4956
Std. Predicted Value	-1.867	5.159	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00929725077 0032	.01542531140 1486	.01089487607 3940	.00082847338 3909
Residual	- .00107978167 9437	.00414475426 0778	.00000000000 0000	.00094211662 9001
Std. Residual	-1.133	4.350	.000	.989

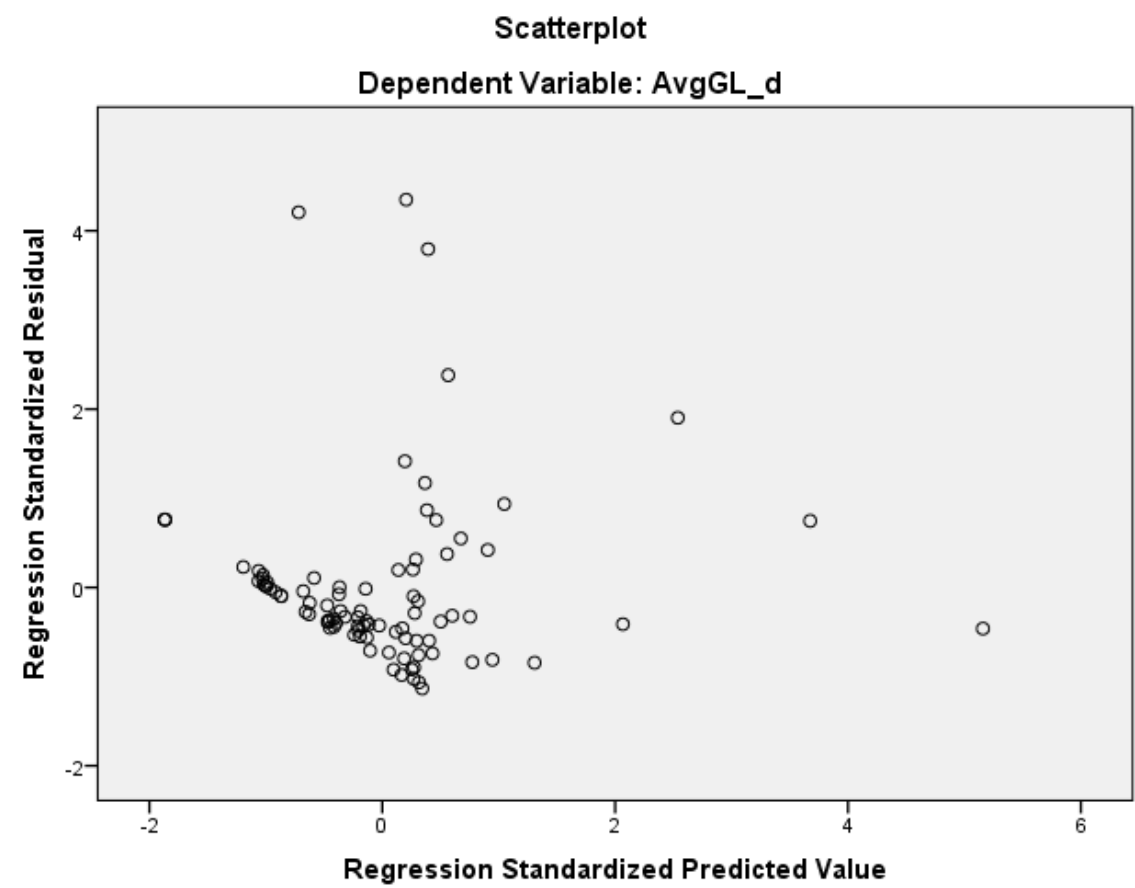
Stud. Residual	-1.156	4.401	.002	1.006
Deleted Residual	-	.00424403930	.00000283424	.00097620300
	.00112468027	0829	9137	5232
	5097			
Stud. Deleted Residual	-1.159	4.964	.019	1.076
Mahal. Distance	.004	36.199	1.978	4.407
Cook's Distance	.000	.188	.012	.033
Centered Leverage Value	.000	.407	.022	.050

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: AvgGL\_d

Charts



REGRESSION

```

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EOut

/METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		31-MAY-2015 10:46:38
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT Ecout  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04
	Memory Required	5920 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_1	Cook's Distance

### Warnings

No variables were entered into the equation.

### REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCoutN

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

### Regression

### Notes

Output Created	31-MAY-2015 10:46:51	
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax	REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_EVCoutN  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time	00:00:00.17



	Elapsed Time	00:00:00.18
	Memory Required	5952 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_2	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCoutN

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.212 <sup>a</sup>	.045	.034	.01504803469 4649
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a. Predictors: (Constant), R\_pro

b. Dependent Variable: PL\_EVCoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	4.182	.044 <sup>b</sup>
	Residual	.020	89	.000		
	Total	.021	90			

a. Dependent Variable: PL\_EVCoutN

b. Predictors: (Constant), R\_pro

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.009	.010		-.891	.375
	R_pro	1.791	.876	.212	2.045	.044

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1		
(Constant)		
R_pro	1.000	1.000

a. Dependent Variable: PL\_EVCoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	-.063 <sup>b</sup>	-.564	.574	-.060	.857	1.167
	PL_TSpoutN	-.115 <sup>b</sup>	-.961	.339	-.102	.751	1.331
	S_pro	-.102 <sup>b</sup>	-.761	.448	-.081	.596	1.678
	SMSP_d	.101 <sup>b</sup>	.968	.336	.103	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.857
	PL_TSpoutN	.751

S_pro	.596
SMSP_d	.995

a. Dependent Variable: PL\_EVCoutN

b. Predictors in the Model: (Constant), R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_pro
1	1	1.987	1.000	.01	.01
	2	.013	12.281	.99	.99

a. Dependent Variable: PL\_EVCoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00313138542 6968	.02287341840 5652	.01098901098 9011	.00324379797 9039
Std. Predicted Value	-2.422	3.664	.000	1.000
Standard Error of Predicted Value	.002	.006	.002	.001

Adjusted Predicted Value	.00338963046 6700	.02723456360 3997	.01107184470 5096	.00346673740 2958
Residual	- .02287341840 5652	.05102530494 3323	.00000000000 0000	.01496420097 9987
Std. Residual	-1.520	3.391	.000	.994
Stud. Residual	-1.659	3.420	-.003	1.006
Deleted Residual	- .02723456360 3997	.05190571397 5430	- .00008283371 6085	.01531613437 4623
Stud. Deleted Residual	-1.675	3.649	.003	1.021
Mahal. Distance	.000	13.423	.989	1.871
Cook's Distance	.002	.262	.012	.031
Centered Leverage Value	.000	.149	.011	.021

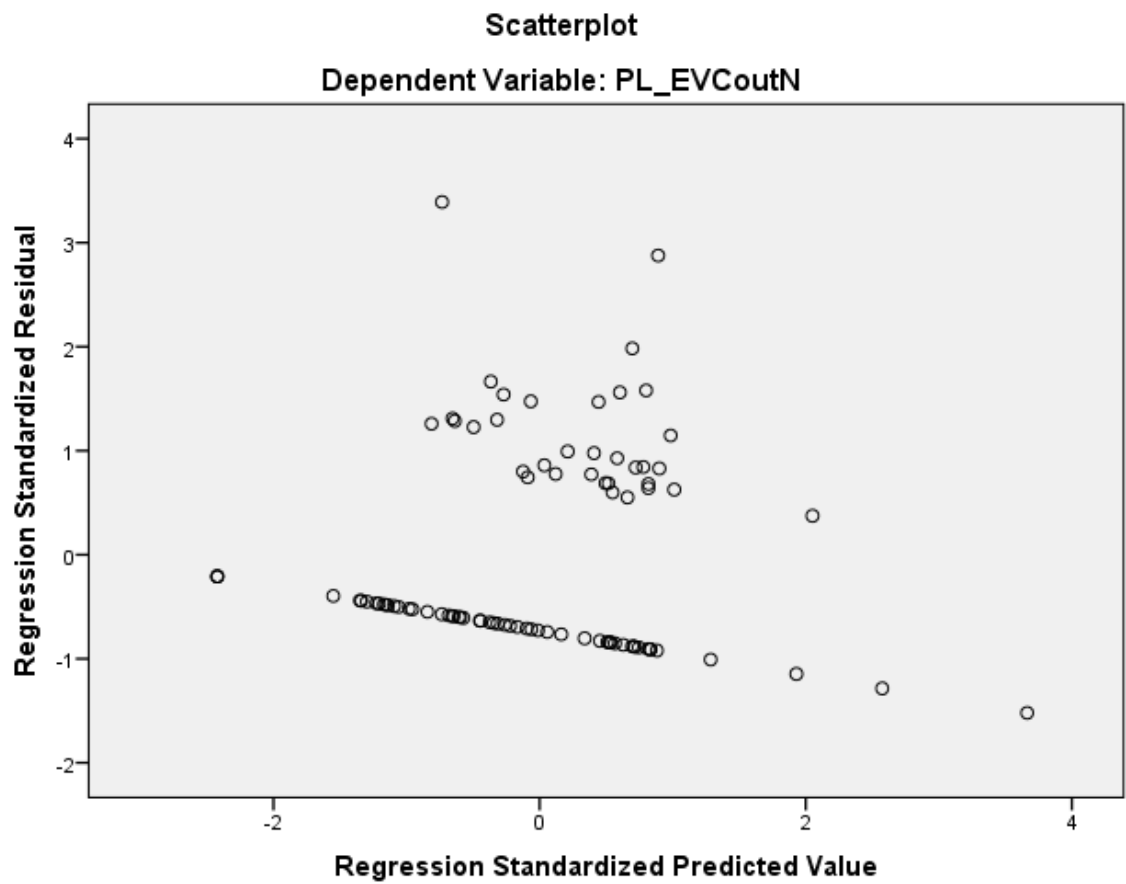
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91

Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCoutN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCout\_TpoutN

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		31-MAY-2015 10:47:06
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.



Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCut_TpoutN  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.17
	Memory Required	6000 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_3	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	-------	--	---

a. Dependent Variable: EVCout\_TpoutN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.293 <sup>a</sup>	.086	.076	.02555722531 3335

a. Predictors: (Constant), R\_pro

b. Dependent Variable: EVCout\_TpoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.005	1	.005	8.362	.005 <sup>b</sup>
	Residual	.058	89	.001		

Total	.064	90			
-------	------	----	--	--	--

a. Dependent Variable: EVCout\_TpoutN

b. Predictors: (Constant), R\_pro

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.058	.017		3.517	.001
R_pro	-4.300	1.487	-.293	-2.892	.005

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
R_pro	1.000	1.000

a. Dependent Variable: EVCout\_TpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.044 <sup>b</sup>	.401	.690	.043	.857	1.167
	PL_TSpoutN	.022 <sup>b</sup>	.189	.850	.020	.751	1.331
	S_pro	.115 <sup>b</sup>	.877	.383	.093	.596	1.678
	SMSP_d	-.032 <sup>b</sup>	-.316	.752	-.034	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN	.857	
	PL_TSpoutN	.751	
	S_pro	.596	
	SMSP_d	.995	

a. Dependent Variable: EVCout\_TpoutN

b. Predictors in the Model: (Constant), R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_pro

1	1	1.987	1.000	.01	.01
	2	.013	12.281	.99	.99

a. Dependent Variable: EVCout\_TpoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .01755283027 8873	.02986004948 6160	.01098901098 9011	.00779037298 2660
Std. Predicted Value	-3.664	2.422	.000	1.000
Standard Error of Predicted Value	.003	.010	.004	.001
Adjusted Predicted Value	- .02089952863 7528	.02397026680 4099	.01079822610 4386	.00766253660 8426
Residual	- .02306670695 5433	.07956983894 1097	.00000000000 0000	.02541484412 0180
Std. Residual	-.903	3.113	.000	.994
Stud. Residual	-.920	3.239	.004	1.014
Deleted Residual	- .02397026680 4099	.08613195270 2999	.00019078488 4625	.02643211201 8252
Stud. Deleted Residual	-.919	3.429	.016	1.045
Mahal. Distance	.000	13.423	.989	1.871

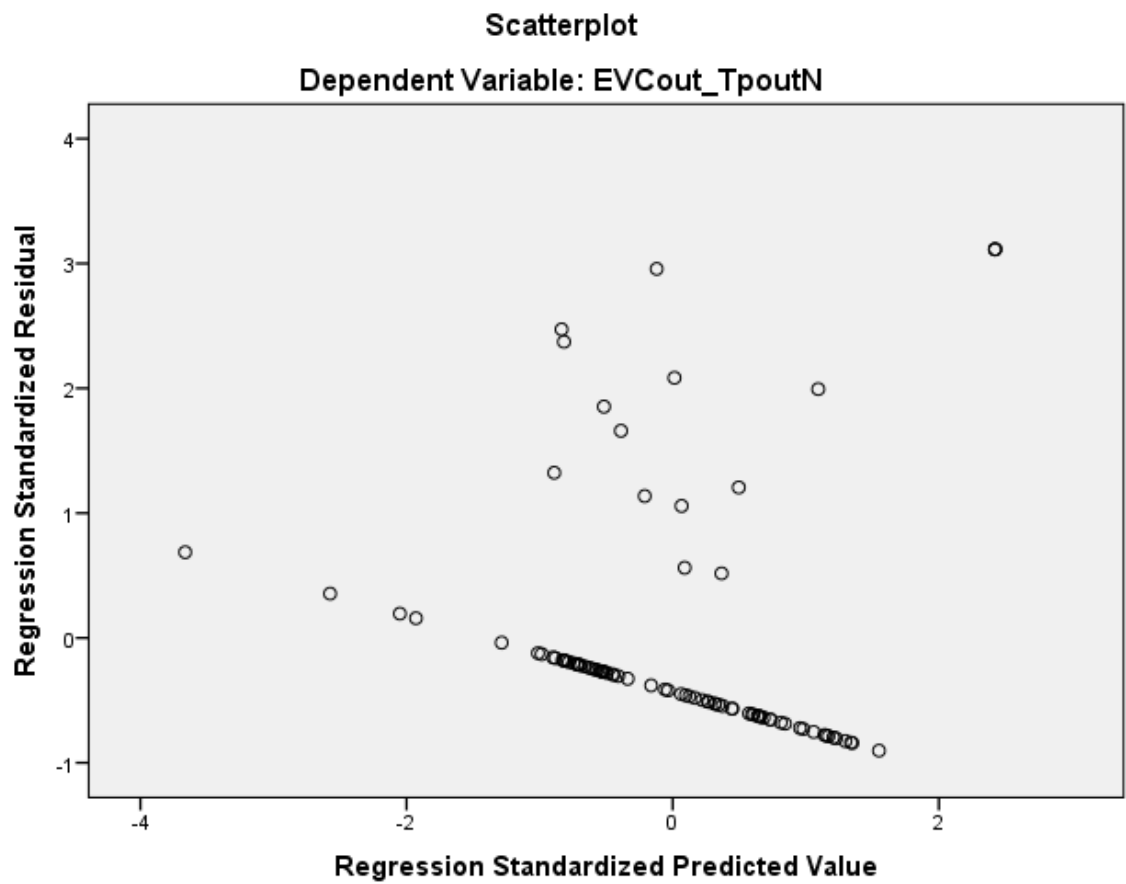
Cook's Distance	.000	.433	.021	.078
Centered Leverage Value	.000	.149	.011	.021

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCout\_TpoutN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCout\_TSpoutN

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Weight	<none>
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	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.



Syntax		<p>REGRESSION</p> <p>/MISSING LISTWISE</p> <p>/STATISTICS COEFF OUTS R ANOVA COLLIN TOL</p> <p>/CRITERIA=PIN(.05) POUT(.10)</p> <p>/NOORIGIN</p> <p>/DEPENDENT EVCut_TSpoutN</p> <p>/METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.24
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
-------	----------------------	----------------------	--------

1	R_pro		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	-------	--	---

a. Dependent Variable: EVCout\_TSpoutN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.300 <sup>a</sup>	.090	.080	.02542800824 9531

a. Predictors: (Constant), R\_pro

b. Dependent Variable: EVCout\_TSpoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.006	1	.006	8.828	.004 <sup>b</sup>
	Residual	.058	89	.001		

Total	.063	90			
-------	------	----	--	--	--

a. Dependent Variable: EVCout\_TSpoutN

b. Predictors: (Constant), R\_pro

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.059	.016		3.599	.001
R_pro	-4.396	1.480	-.300	-2.971	.004

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
R_pro	1.000	1.000

a. Dependent Variable: EVCout\_TSpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.012 <sup>b</sup>	.112	.911	.012	.857	1.167
	PL_TSpoutN	.012 <sup>b</sup>	.100	.920	.011	.751	1.331
	S_pro	.112 <sup>b</sup>	.854	.396	.091	.596	1.678
	SMSP_d	-.032 <sup>b</sup>	-.313	.755	-.033	.995	1.005

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN	.857	
	PL_TSpoutN	.751	
	S_pro	.596	
	SMSP_d	.995	

a. Dependent Variable: EVCout\_TSpoutN

b. Predictors in the Model: (Constant), R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_pro

1	1	1.987	1.000	.01	.01
	2	.013	12.281	.99	.99

a. Dependent Variable: EVCout\_TSpoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .01818804815 4116	.03028003685 1764	.01098901098 9011	.00796375307 5906
Std. Predicted Value	-3.664	2.422	.000	1.000
Standard Error of Predicted Value	.003	.010	.004	.001
Adjusted Predicted Value	- .02165586128 8309	.02424959465 8613	.01078901688 1841	.00783241464 9246
Residual	- .02333550527 6918	.08241207897 6631	.00000000000 0000	.02528634693 4199
Std. Residual	-.918	3.241	.000	.994
Stud. Residual	-.936	3.372	.004	1.015
Deleted Residual	- .02424959465 8613	.08920858800 4112	.00019999410 7170	.02635748747 0143
Stud. Deleted Residual	-.935	3.590	.016	1.049
Mahal. Distance	.000	13.423	.989	1.871

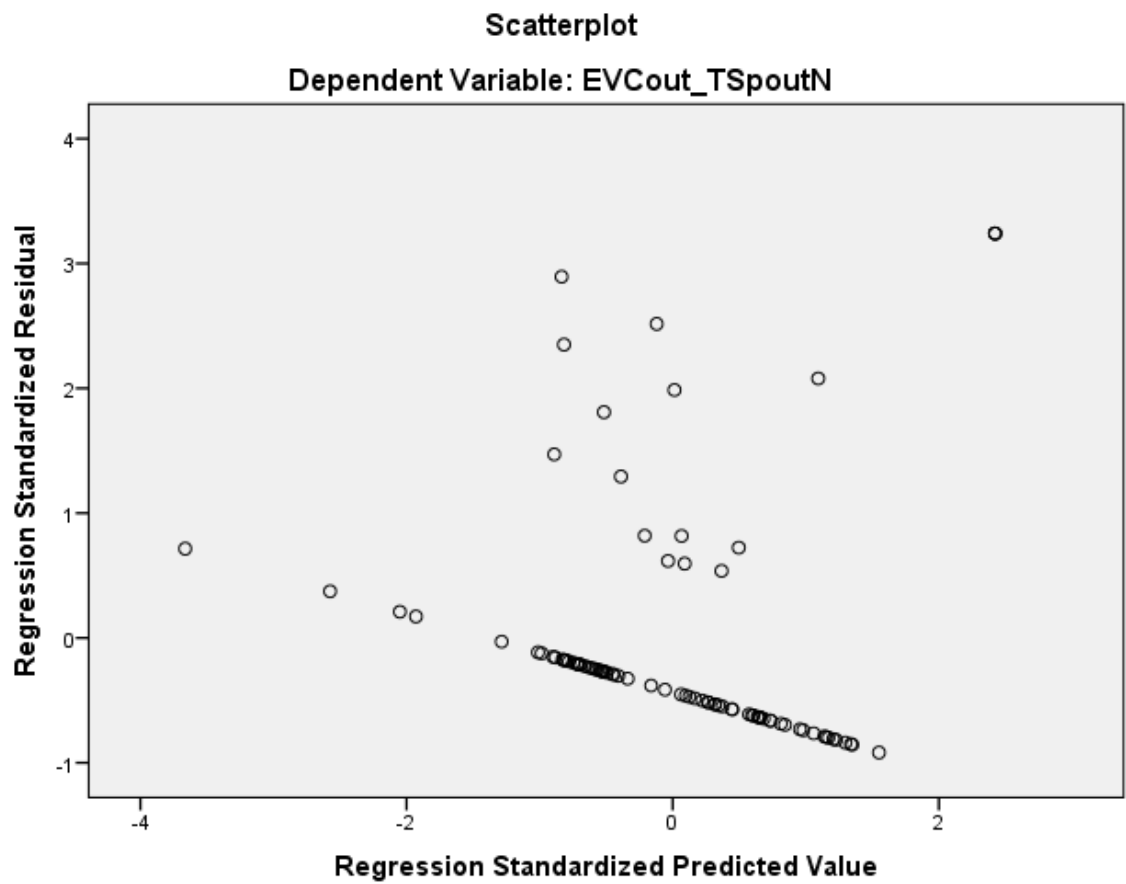
Cook's Distance	.000	.469	.022	.084
Centered Leverage Value	.000	.149	.011	.021

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCout\_TSpoutN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECud

/METHOD=STEPWISE Nodes Edges\_ud Den\_ud CC\_ud GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud  
AvgGL\_ud PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

```
/SCATTERPLOT=(*ZRESID ,*ZPRED)
```

```
/SAVE COOK.
```

## Regression

### Notes

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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.



Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT ECud
		/METHOD=STEPWISE Nodes
		Edges_ud Den_ud CC_ud GD_ud
		Tpaths_ud TSpaths_ud AvgPL_ud
		AvgGL_ud PL_TpudN PL_TspudN
		S_ud R_ud SMSP_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.23
	Elapsed Time	00:00:00.19
	Memory Required	15904 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_5	Cook's Distance
Modified		

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Edges_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	PL_TspudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECud

#### Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.275 <sup>a</sup>	.075	.065	.004524212217333
2	.380 <sup>b</sup>	.144	.125	.004376820897041
3	.430 <sup>c</sup>	.185	.157	.004296435643369

a. Predictors: (Constant), Edges\_ud

b. Predictors: (Constant), Edges\_ud, R\_ud

c. Predictors: (Constant), Edges\_ud, R\_ud, PL\_TspudN

d. Dependent Variable: ECud

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	7.266	.008 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			
2	Regression	.000	2	.000	7.430	.001 <sup>c</sup>
	Residual	.002	88	.000		
	Total	.002	90			
3	Regression	.000	3	.000	6.581	.000 <sup>d</sup>

Residual	.002	87	.000		
Total	.002	90			

a. Dependent Variable: ECud

b. Predictors: (Constant), Edges\_ud

c. Predictors: (Constant), Edges\_ud, R\_ud

d. Predictors: (Constant), Edges\_ud, R\_ud, PL\_TspudN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.015	.002		9.347	.000
	Edges_ud	-.381	.141	-.275	-2.696	.008
2	(Constant)	.043	.011		4.053	.000
	Edges_ud	-.430	.138	-.310	-3.118	.002
	R_ud	-2.516	.944	-.265	-2.664	.009
3	(Constant)	.037	.011		3.426	.001
	Edges_ud	-.414	.136	-.299	-3.053	.003
	R_ud	-2.371	.930	-.250	-2.550	.013
	PL_TspudN	.388	.187	.202	2.079	.041

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Edges_ud	1.000	1.000
2	(Constant)		
	Edges_ud	.982	1.018
	R_ud	.982	1.018
3	(Constant)		
	Edges_ud	.979	1.022
	R_ud	.976	1.024
	PL_TspudN	.992	1.008

a. Dependent Variable: ECud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	.931 <sup>b</sup>	1.382	.171	.146	.023	44.120	.023
	Den_ud	.114 <sup>b</sup>	.549	.584	.058	.243	4.113	.243
	CC_ud	-.149 <sup>b</sup>	-1.473	.144	-.155	1.000	1.000	1.000

	GD_ud	-.042 <sup>b</sup>	-.407	.685	-.043	1.000	1.000	1.000
	Tpaths_ud	-.013 <sup>b</sup>	-.126	.900	-.013	.940	1.064	.940
	TSpaths_ud	-.141 <sup>b</sup>	-.886	.378	-.094	.412	2.429	.412
	AvgPL_ud	-.045 <sup>b</sup>	-.438	.662	-.047	1.000	1.000	1.000
	AvgGL_ud	-.122 <sup>b</sup>	-1.161	.249	-.123	.939	1.065	.939
	PL_TpudN	.098 <sup>b</sup>	.946	.347	.100	.960	1.042	.960
	PL_TspudN	.221 <sup>b</sup>	2.209	.030	.229	.998	1.002	.998
	S_ud	-.199 <sup>b</sup>	-1.622	.108	-.170	.676	1.480	.676
	R_ud	-.265 <sup>b</sup>	-2.664	.009	-.273	.982	1.018	.982
	SMSP_ud	-.140 <sup>b</sup>	-1.355	.179	-.143	.962	1.040	.962
2	Nodes	-.157 <sup>c</sup>	-.192	.848	-.021	.015	67.910	.015
	Den_ud	.041 <sup>c</sup>	.203	.840	.022	.238	4.193	.235
	CC_ud	-.009 <sup>c</sup>	-.075	.940	-.008	.704	1.421	.691
	GD_ud	.004 <sup>c</sup>	.038	.970	.004	.970	1.031	.953
	Tpaths_ud	.009 <sup>c</sup>	.092	.927	.010	.933	1.072	.919
	TSpaths_ud	-.104 <sup>c</sup>	-.674	.502	-.072	.408	2.449	.402
	AvgPL_ud	.001 <sup>c</sup>	.013	.990	.001	.969	1.032	.952
	AvgGL_ud	-.013 <sup>c</sup>	-.117	.907	-.013	.782	1.279	.782
	PL_TpudN	.056 <sup>c</sup>	.548	.585	.059	.934	1.070	.934
	PL_TspudN	.202 <sup>c</sup>	2.079	.041	.218	.992	1.008	.976
	S_ud	-.055 <sup>c</sup>	-.393	.695	-.042	.510	1.960	.510
	SMSP_ud	-.006 <sup>c</sup>	-.047	.962	-.005	.714	1.401	.714
3	Nodes	-.237 <sup>d</sup>	-.295	.769	-.032	.015	68.065	.015

Den_ud	.086 <sup>d</sup>	.431	.668	.046	.236	4.242	.231
CC_ud	-.025 <sup>d</sup>	-.215	.830	-.023	.700	1.428	.684
GD_ud	.001 <sup>d</sup>	.007	.995	.001	.970	1.031	.947
Tpaths_ud	.008 <sup>d</sup>	.076	.939	.008	.933	1.072	.916
TSpaths_ud	.014 <sup>d</sup>	.085	.932	.009	.353	2.837	.353
AvgPL_ud	-.003 <sup>d</sup>	-.032	.974	-.003	.968	1.033	.946
AvgGL_ud	.072 <sup>d</sup>	.618	.538	.067	.692	1.445	.692
PL_TpudN	.024 <sup>d</sup>	.233	.817	.025	.911	1.098	.911
S_ud	-.114 <sup>d</sup>	-.821	.414	-.088	.491	2.037	.491
SMSP_ud	-.048 <sup>d</sup>	-.409	.683	-.044	.693	1.443	.693

a. Dependent Variable: ECud

b. Predictors in the Model: (Constant), Edges\_ud

c. Predictors in the Model: (Constant), Edges\_ud, R\_ud

d. Predictors in the Model: (Constant), Edges\_ud, R\_ud, PL\_TspudN

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Edges_ud	R_ud
1	1	1.956	1.000	.02	.02	
	2	.044	6.697	.98	.98	
2	1	2.940	1.000	.00	.01	.00

	2	.060	7.027	.00	.95	.01
	3	.001	55.585	1.00	.04	.99
3	1	3.896	1.000	.00	.01	.00
	2	.074	7.244	.00	.79	.00
	3	.029	11.636	.01	.16	.02
	4	.001	65.044	.99	.05	.98

**Collinearity Diagnostics<sup>a</sup>**

		Variance Proportions
Model	Dimension	PL_TspudN
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.15
	3	.81
	4	.03

a. Dependent Variable: ECud



**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00619483180 3441	.01723693124 9499	.01098901098 9011	.00201236711 7889
Std. Predicted Value	-2.382	3.105	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	.00490695238 1134	.01722144149 2438	.01098060669 1805	.00206529397 2479
Residual	- .00929166004 0617	.00831433385 6106	.00000000000 0000	.00422422149 7865
Std. Residual	-2.163	1.935	.000	.983
Stud. Residual	-2.205	1.959	.001	1.000
Deleted Residual	- .00966050382 7035	.00852192752 0633	.00000840429 7206	.00437354463 3142
Stud. Deleted Residual	-2.256	1.992	.001	1.006
Mahal. Distance	.042	45.196	2.967	5.342
Cook's Distance	.000	.094	.009	.013
Centered Leverage Value	.000	.502	.033	.059

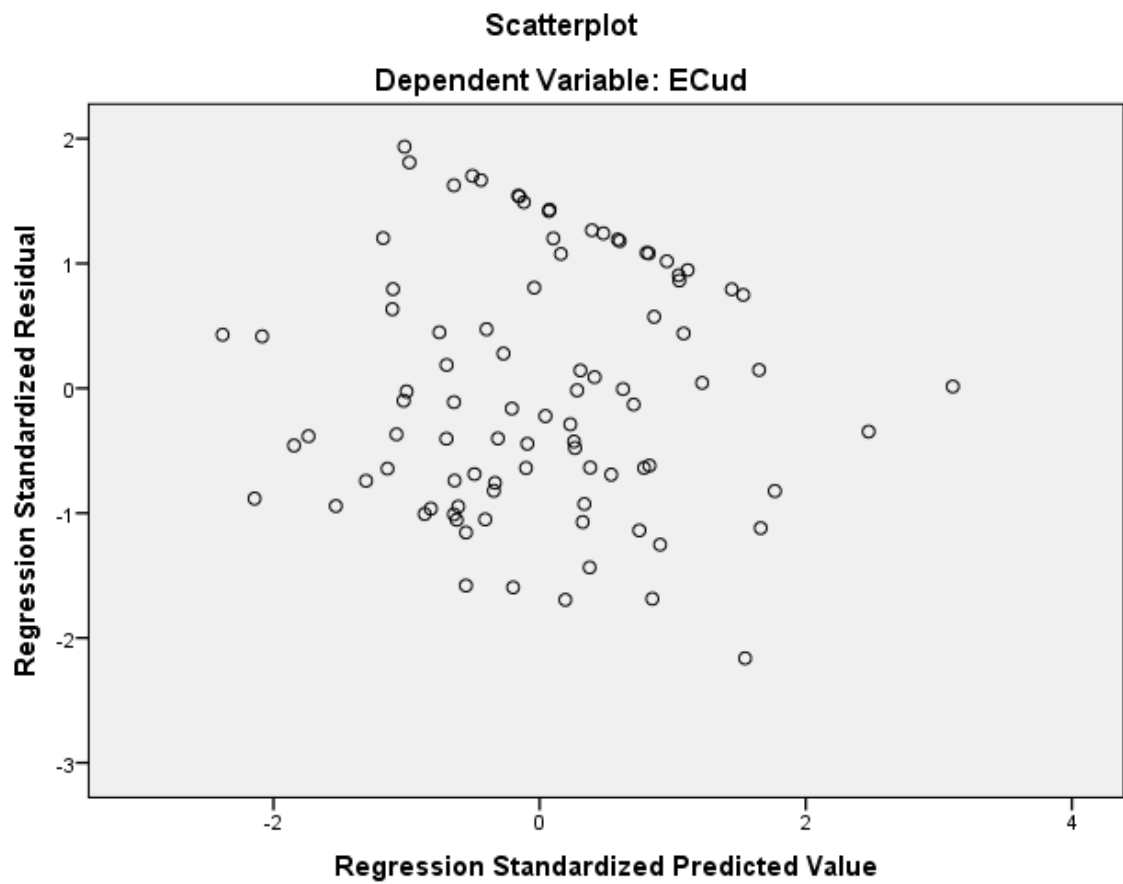
**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91

Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECud

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCudN

/METHOD=STEPWISE Nodes Edges\_ud Den\_ud CC\_ud GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud  
AvgGL\_ud PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:36:42
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_EVCudN  /METHOD=STEPWISE Nodes Edges_ud Den_ud CC_ud GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.19
	Memory Required	15952 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_6	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	AvgGL_ud	.	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCudN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.236 <sup>a</sup>	.056	.045	.00201639834 9053

a. Predictors: (Constant), AvgGL\_ud

b. Dependent Variable: PL\_EVCudN

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.000	1	.000	5.272	.024 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			

a. Dependent Variable: PL\_EVCudN

b. Predictors: (Constant), AvgGL\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.015	.002		9.093	.000
	AvgGL_ud	-.334	.145	-.236	-2.296	.024

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_ud	1.000	1.000

a. Dependent Variable: PL\_EVCudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	.028 <sup>b</sup>	.263	.793	.028	.960	1.042
	Edges_ud	.052 <sup>b</sup>	.485	.629	.052	.939	1.065
	Den_ud	-.034 <sup>b</sup>	-.319	.751	-.034	.942	1.061
	CC_ud	.004 <sup>b</sup>	.042	.966	.005	.999	1.001
	GD_ud	-.038 <sup>b</sup>	-.357	.722	-.038	.964	1.038
	Tpaths_ud	.018 <sup>b</sup>	.167	.868	.018	.960	1.042
	TSpaths_ud	.074 <sup>b</sup>	.635	.527	.068	.787	1.270
	AvgPL_ud	-.029 <sup>b</sup>	-.273	.786	-.029	.962	1.039
	PL_TpudN	-.134 <sup>b</sup>	-1.309	.194	-.138	1.000	1.000
	PL_TspudN	-.018 <sup>b</sup>	-.162	.872	-.017	.885	1.130
	S_ud	-.102 <sup>b</sup>	-.989	.325	-.105	1.000	1.000
	R_ud	.081 <sup>b</sup>	.728	.469	.077	.871	1.149
	SMSP_ud	-.002 <sup>b</sup>	-.023	.982	-.002	.996	1.004

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	Nodes	.960	



Edges_ud	.939
Den_ud	.942
CC_ud	.999
GD_ud	.964
Tpaths_ud	.960
TSpaths_ud	.787
AvgPL_ud	.962
PL_TpudN	1.000
PL_TspudN	.885
S_ud	1.000
R_ud	.871
SMSP_ud	.996

a. Dependent Variable: PL\_EVCudN

b. Predictors in the Model: (Constant), AvgGL\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	AvgGL_ud
1	1	1.991	1.000	.00	.00
	2	.009	15.188	1.00	1.00

a. Dependent Variable: PL\_EVCudN

**Residuals Statistics<sup>a</sup>**

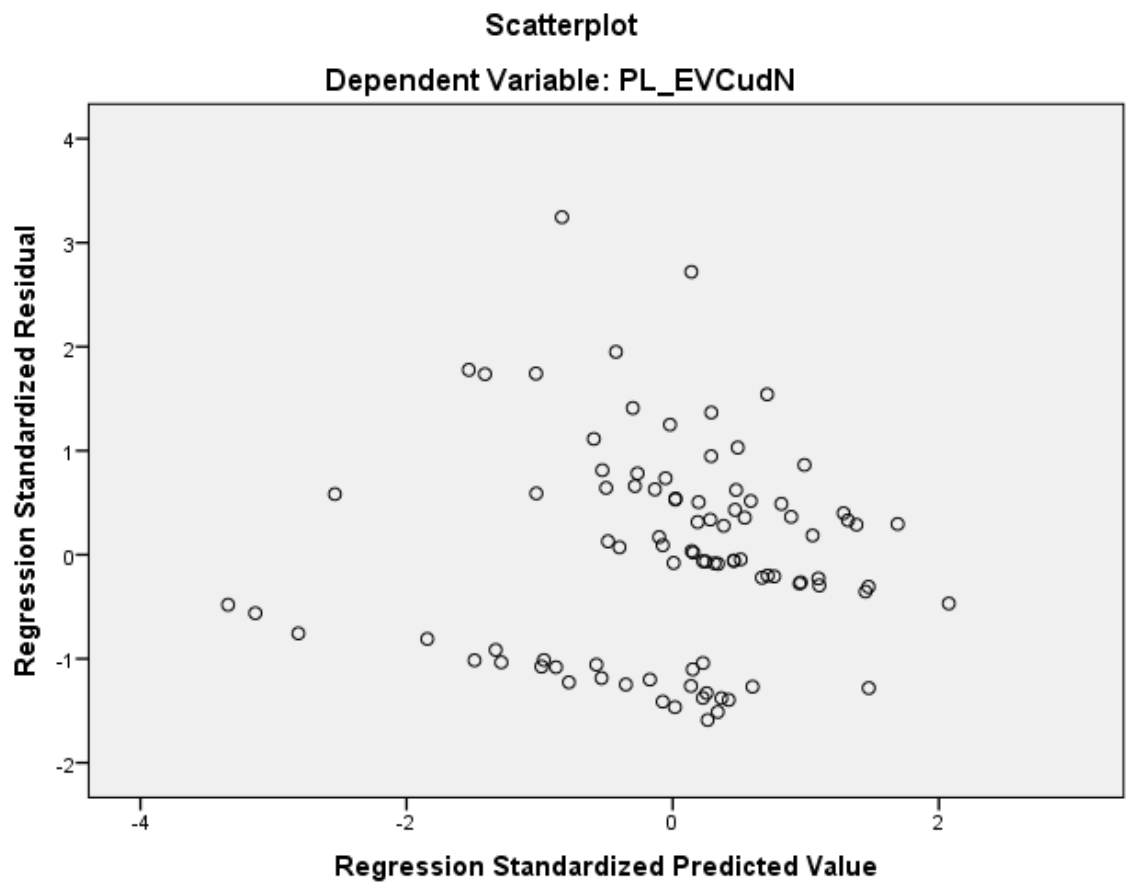
	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00935835670 6798	.01200177613 6458	.01098901098 9011	.00048803485 9151
Std. Predicted Value	-3.341	2.075	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00950972270 2205	.01206079591 0656	.01099329920 1643	.00047976618 1507
Residual	- .00320300459 8618	.00654249358 9222	.00000000000 0000	.00200516484 4660
Std. Residual	-1.588	3.245	.000	.994
Stud. Residual	-1.598	3.275	-.001	1.004
Deleted Residual	- .00324110523 7976	.00666707893 8335	- .00000428821 2632	.00204421527 7740
Stud. Deleted Residual	-1.612	3.473	.002	1.018
Mahal. Distance	.000	11.164	.989	1.927
Cook's Distance	.000	.102	.010	.015
Centered Leverage Value	.000	.124	.011	.021

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCudN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TpudN

/METHOD=STEPWISE Nodes Edges\_ud Den\_ud CC\_ud GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud  
AvgGL\_ud PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	29-MAY-2015 10:37:01	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCud_TpudN  /METHOD=STEPWISE Nodes Edges_ud Den_ud CC_ud GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Memory Required	15984 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Tpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	GD_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	Den_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

5	PL_TpudN	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	----------	---

a. Dependent Variable: EVCud\_TpudN

**Model Summary<sup>f</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.298 <sup>a</sup>	.089	.079	.00173193241 2847
2	.691 <sup>b</sup>	.478	.466	.00131833672 6049
3	.971 <sup>c</sup>	.942	.940	.00044117769 2690
4	.977 <sup>d</sup>	.955	.953	.00039148096 6527
5	.984 <sup>e</sup>	.968	.966	.00033061092 1451

a. Predictors: (Constant), Tpaths\_ud

b. Predictors: (Constant), Tpaths\_ud, GD\_ud

c. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud



d. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, Den\_ud

e. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, Den\_ud, PL\_TpudN

f. Dependent Variable: EVCud\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	8.695	.004 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	40.304	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	472.862	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.000	90			
4	Regression	.000	4	.000	456.526	.000 <sup>e</sup>
	Residual	.000	86	.000		
	Total	.000	90			
5	Regression	.000	5	.000	519.202	.000 <sup>f</sup>
	Residual	.000	85	.000		

Total	.000	90			
-------	------	----	--	--	--

a. Dependent Variable: EVCud\_TpudN

b. Predictors: (Constant), Tpaths\_ud

c. Predictors: (Constant), Tpaths\_ud, GD\_ud

d. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

e. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, Den\_ud

f. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, Den\_ud, PL\_TpudN

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.016	.002		9.950	.000
	Tpaths_ud	-.417	.141	-.298	-2.949	.004
2	(Constant)	.015	.001		12.335	.000
	Tpaths_ud	-3.035	.341	-2.170	-8.909	.000
	GD_ud	2.693	.332	1.973	8.100	.000
3	(Constant)	.011	.000		25.182	.000
	Tpaths_ud	-1.441	.129	-1.031	-11.175	.000
	GD_ud	21.364	.715	15.655	29.879	.000
	AvgPL_ud	-19.902	.753	-14.784	-26.435	.000

4	(Constant)	.012	.001		24.385	.000
	Tpaths_ud	-1.805	.136	-1.291	-13.270	.000
	GD_ud	20.921	.641	15.331	32.651	.000
	AvgPL_ud	-19.149	.685	-14.224	-27.945	.000
	Den_ud	-.101	.020	-.135	-4.949	.000
5	(Constant)	.014	.001		27.566	.000
	Tpaths_ud	-1.910	.116	-1.366	-16.432	.000
	GD_ud	21.460	.549	15.726	39.117	.000
	AvgPL_ud	-19.586	.583	-14.549	-33.578	.000
	Den_ud	-.138	.018	-.185	-7.530	.000
	PL_TpudN	-.109	.018	-.125	-5.965	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_ud	1.000	1.000
2	(Constant)		
	Tpaths_ud	.100	10.007
	GD_ud	.100	10.007
3	(Constant)		
	Tpaths_ud	.078	12.806
	GD_ud	.002	413.350

	AvgPL_ud	.002	470.893
4	(Constant)		
	Tpaths_ud	.055	18.097
	GD_ud	.002	421.563
	AvgPL_ud	.002	495.367
	Den_ud	.699	1.432
5	(Constant)		
	Tpaths_ud	.054	18.518
	GD_ud	.002	433.320
	AvgPL_ud	.002	503.325
	Den_ud	.619	1.616
	PL_TpudN	.849	1.178

a. Dependent Variable: EVCud\_TpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.196 <sup>b</sup>	-1.900	.061	-.198	.935	1.070	.935
	Edges_ud	-.185 <sup>b</sup>	-1.793	.076	-.188	.940	1.064	.940
	Den_ud	.062 <sup>b</sup>	.588	.558	.063	.940	1.064	.940

	CC_ud	.059 <sup>b</sup>	.577	.565	.061	1.000	1.000	1.000
	GD_ud	1.973 <sup>b</sup>	8.100	.000	.654	.100	10.007	.100
	TSpaths_ud	-.033 <sup>b</sup>	-.319	.750	-.034	.987	1.013	.987
	AvgPL_ud	1.723 <sup>b</sup>	5.933	.000	.535	.088	11.400	.088
	AvgGL_ud	.006 <sup>b</sup>	.061	.951	.007	.960	1.042	.960
	PL_TpudN	.101 <sup>b</sup>	1.000	.320	.106	1.000	1.000	1.000
	PL_TspudN	-.087 <sup>b</sup>	-.859	.393	-.091	1.000	1.000	1.000
	S_ud	.050 <sup>b</sup>	.474	.637	.050	.927	1.078	.927
	R_ud	.145 <sup>b</sup>	1.441	.153	.152	.998	1.002	.998
	SMSP_ud	.072 <sup>b</sup>	.708	.481	.075	.998	1.002	.998
2	Nodes	.604 <sup>c</sup>	6.121	.000	.549	.430	2.325	.043
	Edges_ud	.537 <sup>c</sup>	5.535	.000	.510	.472	2.121	.047
	Den_ud	-.305 <sup>c</sup>	-3.626	.000	-.362	.735	1.361	.074
	CC_ud	-.077 <sup>c</sup>	-.975	.332	-.104	.955	1.047	.095
	TSpaths_ud	.216 <sup>c</sup>	2.705	.008	.279	.864	1.158	.086
	AvgPL_ud	-14.784 <sup>c</sup>	-26.435	.000	-.943	.002	470.893	.002
	AvgGL_ud	.004 <sup>c</sup>	.045	.964	.005	.960	1.042	.100
	PL_TpudN	.064 <sup>c</sup>	.834	.407	.089	.996	1.004	.100
	PL_TspudN	-.108 <sup>c</sup>	-1.409	.162	-.149	.999	1.001	.100
	S_ud	-.664 <sup>c</sup>	-8.333	.000	-.666	.526	1.902	.053
	R_ud	-.118 <sup>c</sup>	-1.411	.162	-.150	.845	1.184	.085
	SMSP_ud	-.010 <sup>c</sup>	-.127	.899	-.014	.981	1.019	.098
3	Nodes	.158 <sup>d</sup>	3.848	.000	.383	.338	2.955	.002

	Edges_ud	.156 <sup>d</sup>	4.112	.000	.405	.392	2.551	.002
	Den_ud	-.135 <sup>d</sup>	-4.949	.000	-.471	.699	1.432	.002
	CC_ud	.029 <sup>d</sup>	1.090	.279	.117	.933	1.071	.002
	TSpaths_ud	.100 <sup>d</sup>	3.829	.000	.382	.841	1.189	.002
	AvgGL_ud	.032 <sup>d</sup>	1.204	.232	.129	.958	1.043	.002
	PL_TpudN	-.072 <sup>d</sup>	-2.833	.006	-.292	.958	1.044	.002
	PL_TspudN	-.010 <sup>d</sup>	-.386	.700	-.042	.978	1.022	.002
	S_ud	-.007 <sup>d</sup>	-.131	.896	-.014	.266	3.760	.001
	R_ud	.082 <sup>d</sup>	2.933	.004	.302	.787	1.271	.002
	SMSP_ud	.055 <sup>d</sup>	2.168	.033	.228	.972	1.028	.002
4	Nodes	-.125 <sup>e</sup>	-1.276	.205	-.137	.054	18.504	.001
	Edges_ud	.005 <sup>e</sup>	.076	.939	.008	.107	9.361	.002
	CC_ud	.012 <sup>e</sup>	.494	.622	.054	.913	1.096	.002
	TSpaths_ud	.030 <sup>e</sup>	.865	.389	.093	.449	2.227	.002
	AvgGL_ud	.004 <sup>e</sup>	.145	.885	.016	.901	1.110	.002
	PL_TpudN	-.125 <sup>e</sup>	-5.965	.000	-.543	.849	1.178	.002
	PL_TspudN	-.017 <sup>e</sup>	-.740	.461	-.080	.974	1.026	.002
	S_ud	-.009 <sup>e</sup>	-.203	.839	-.022	.266	3.761	.001
	R_ud	.057 <sup>e</sup>	2.187	.032	.231	.749	1.334	.002
	SMSP_ud	.008 <sup>e</sup>	.297	.767	.032	.794	1.260	.002
5	Nodes	-.093 <sup>f</sup>	-1.116	.268	-.121	.054	18.585	.001
	Edges_ud	.012 <sup>f</sup>	.201	.841	.022	.107	9.364	.002
	CC_ud	.021 <sup>f</sup>	1.045	.299	.113	.908	1.102	.002

TSpaths_ud	.032 <sup>f</sup>	1.104	.273	.120	.449	2.227	.002
AvgGL_ud	-.008 <sup>f</sup>	-.376	.708	-.041	.893	1.119	.002
PL_TspudN	.004 <sup>f</sup>	.181	.857	.020	.944	1.060	.002
S_ud	-.010 <sup>f</sup>	-.263	.793	-.029	.266	3.761	.001
R_ud	.020 <sup>f</sup>	.874	.384	.095	.689	1.452	.002
SMSP_ud	.024 <sup>f</sup>	1.103	.273	.119	.781	1.280	.002

a. Dependent Variable: EVCud\_TpudN

b. Predictors in the Model: (Constant), Tpaths\_ud

c. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud

d. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

e. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, Den\_ud

f. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, Den\_ud, PL\_TpudN

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Tpaths_ud	GD_ud
1	1	1.993	1.000	.00	.00	
	2	.007	17.184	1.00	1.00	
2	1	2.990	1.000	.00	.00	.00
	2	.009	18.241	.99	.02	.03
	3	.001	65.067	.01	.98	.97

3	1	3.989	1.000	.00	.00	.00
	2	.010	19.638	.85	.01	.00
	3	.001	67.633	.02	.83	.01
	4	1.625E-5	495.470	.13	.17	.99
4	1	4.942	1.000	.00	.00	.00
	2	.050	9.954	.00	.00	.00
	3	.008	25.465	.66	.00	.00
	4	.001	88.495	.19	.80	.01
	5	1.567E-5	561.581	.15	.20	.99
5	1	5.905	1.000	.00	.00	.00
	2	.055	10.403	.00	.00	.00
	3	.034	13.190	.00	.00	.00
	4	.005	33.016	.67	.00	.00
	5	.001	100.273	.27	.83	.01
	6	1.535E-5	620.190	.06	.17	.99

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions		
		AvgPL_ud	Den_ud	PL_TpudN
1	1			
	2			
2	1			
	2			



	3			
3	1	.00		
	2	.00		
	3	.00		
	4	1.00		
4	1	.00	.00	
	2	.00	.48	
	3	.00	.21	
	4	.00	.28	
	5	.99	.04	
5	1	.00	.00	.00
	2	.00	.39	.10
	3	.00	.03	.50
	4	.00	.23	.31
	5	.01	.34	.07
	6	.99	.02	.02

a. Dependent Variable: EVCud\_TpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	.00461840210 4825	.01348371431 2315	.01098901098 9011	.00177561607 3317
Std. Predicted Value	-3.588	1.405	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00709834508 5979	.01364332716 9120	.01102388305 4310	.00170214134 2209
Residual	- .00130947772 4135	.00064089352 9635	.00000000000 0000	.00032129606 3148
Std. Residual	-3.961	1.939	.000	.972
Stud. Residual	-4.195	1.974	-.030	1.070
Deleted Residual	- .00282541639 1715	.00066452857 5726	- .00003487206 5299	.00047136669 5398
Stud. Deleted Residual	-4.683	2.009	-.038	1.106
Mahal. Distance	.868	78.006	4.945	9.792
Cook's Distance	.000	10.684	.148	1.131
Centered Leverage Value	.010	.867	.055	.109

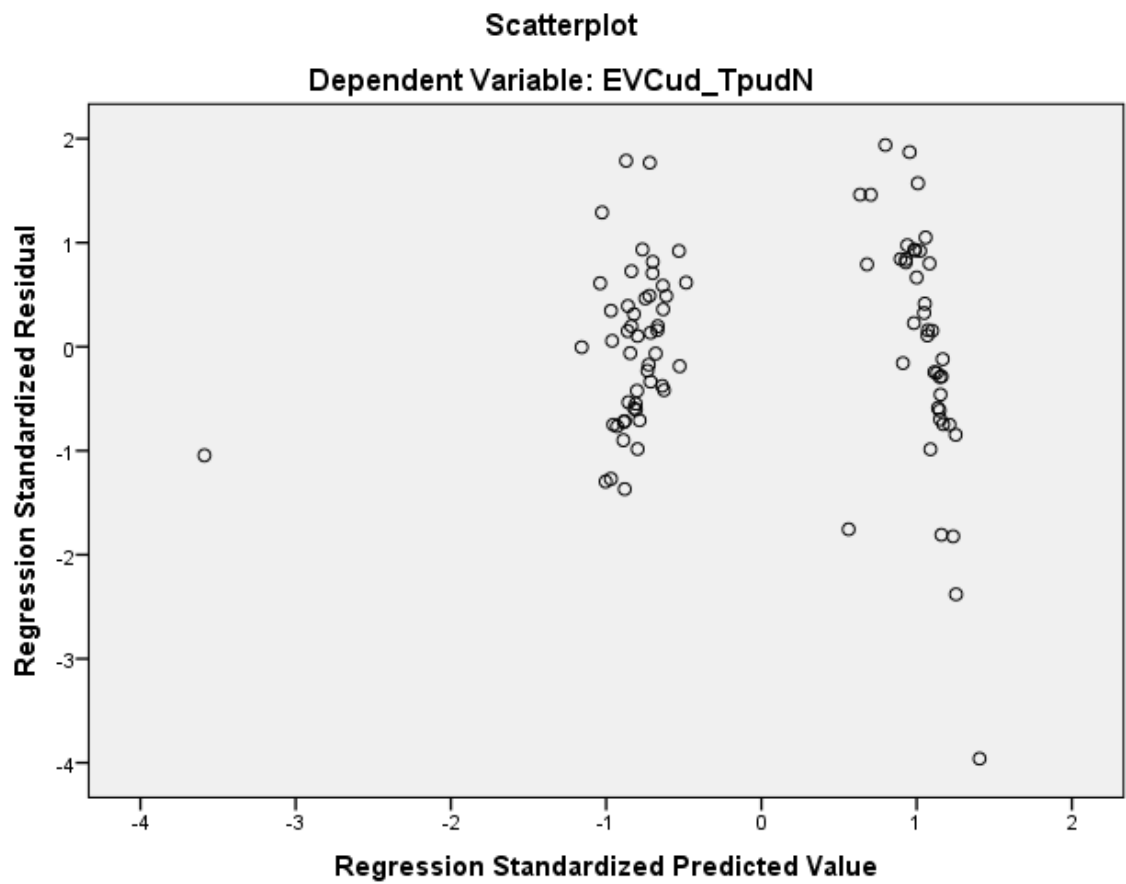
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91

Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCud\_TpudN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TSpudN

/METHOD=STEPWISE Nodes Edges\_ud Den\_ud CC\_ud GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud  
AvgGL\_ud PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:37:39
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCud_TSpudN  /METHOD=STEPWISE Nodes Edges_ud Den_ud CC_ud GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04
	Memory Required	16032 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_8	Cook's Distance

### Warnings

No variables were entered into the equation.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TpudN

/METHOD=STEPWISE Nodes Edges\_ud Den\_ud CC\_ud GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud  
AvgGL\_ud PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	29-MAY-2015 10:38:00
Comments	
Input	Active Dataset DataSet3

	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90
	Missing Value Handling	<p>Definition of Missing</p> <p>User-defined missing values are treated as missing.</p> <p>Cases Used</p> <p>Statistics are based on cases with no missing values for any variable used.</p>
Syntax		<p>REGRESSION</p> <p>/MISSING LISTWISE</p> <p>/STATISTICS COEFF OUTS R ANOVA COLLIN TOL</p> <p>/CRITERIA=PIN(.05) POUT(.10)</p> <p>/NOORIGIN</p> <p>/DEPENDENT EVCud_TpudN</p> <p>/METHOD=STEPWISE Nodes Edges_ud Den_ud CC_ud GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud PL_TpudN PL_TspudN S_ud R_ud SMSP_ud</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
Resources	Processor Time	00:00:00.23
	Elapsed Time	00:00:00.20



	Memory Required	16064 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_9	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Tpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	GD_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

3	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4		Tpaths_ud	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
5	PL_TpudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
6	Den_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

7	S_ud	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: EVCud\_TpudN

**Model Summary<sup>h</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.237 <sup>a</sup>	.056	.045	.00162923721 1454
2	.731 <sup>b</sup>	.535	.524	.00115058078 0462
3	.972 <sup>c</sup>	.945	.943	.00039811468 2009
4	.972 <sup>d</sup>	.945	.943	.00039711562 4789
5	.976 <sup>e</sup>	.953	.952	.00036612682 6459
6	.980 <sup>f</sup>	.961	.959	.00033671022 0729
7	.984 <sup>g</sup>	.969	.967	.00030135691 4183

- a. Predictors: (Constant), Tpaths\_ud
- b. Predictors: (Constant), Tpaths\_ud, GD\_ud
- c. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud
- d. Predictors: (Constant), GD\_ud, AvgPL\_ud
- e. Predictors: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN
- f. Predictors: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN, Den\_ud
- g. Predictors: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN, Den\_ud, S\_ud
- h. Dependent Variable: EVCud\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	5.217	.025 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			
2	Regression	.000	2	.000	49.955	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.000	89			
3	Regression	.000	3	.000	491.721	.000 <sup>d</sup>
	Residual	.000	86	.000		
	Total	.000	89			
4	Regression	.000	2	.000	741.014	.000 <sup>e</sup>

	Residual	.000	87	.000		
	Total	.000	89			
5	Regression	.000	3	.000	586.624	.000 <sup>f</sup>
	Residual	.000	86	.000		
	Total	.000	89			
6	Regression	.000	4	.000	524.372	.000 <sup>g</sup>
	Residual	.000	85	.000		
	Total	.000	89			
7	Regression	.000	5	.000	528.119	.000 <sup>h</sup>
	Residual	.000	84	.000		
	Total	.000	89			

a. Dependent Variable: EVCud\_TpudN

b. Predictors: (Constant), Tpaths\_ud

c. Predictors: (Constant), Tpaths\_ud, GD\_ud

d. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

e. Predictors: (Constant), GD\_ud, AvgPL\_ud

f. Predictors: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN

g. Predictors: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN, Den\_ud

h. Predictors: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN, Den\_ud, S\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.014	.002		9.623	.000
	Tpaths_ud	-.312	.136	-.237	-2.284	.025
2	(Constant)	.016	.001		15.019	.000
	Tpaths_ud	-5.647	.572	-4.289	-9.867	.000
	GD_ud	5.162	.546	4.111	9.458	.000
3	(Constant)	.010	.000		21.390	.000
	Tpaths_ud	-.219	.292	-.166	-.751	.455
	GD_ud	22.869	.725	18.211	31.560	.000
	AvgPL_ud	-22.527	.890	-18.188	-25.311	.000
4	(Constant)	.009	.000		26.268	.000
	GD_ud	23.160	.611	18.443	37.927	.000
	AvgPL_ud	-23.018	.602	-18.585	-38.218	.000
5	(Constant)	.010	.000		26.891	.000
	GD_ud	23.616	.574	18.806	41.131	.000
	AvgPL_ud	-23.464	.566	-18.945	-41.446	.000
	PL_TpudN	-.077	.019	-.096	-4.044	.000
6	(Constant)	.011	.000		25.421	.000
	GD_ud	23.831	.531	18.977	44.908	.000
	AvgPL_ud	-23.689	.524	-19.127	-45.247	.000
	PL_TpudN	-.102	.019	-.127	-5.504	.000

	Den_ud	-.068	.017	-.093	-4.085	.000
7	(Constant)	.010	.000		20.280	.000
	GD_ud	24.498	.496	19.508	49.425	.000
	AvgPL_ud	-24.337	.488	-19.651	-49.824	.000
	PL_TpudN	-.106	.017	-.133	-6.395	.000
	Den_ud	-.093	.016	-.127	-5.849	.000
	S_ud	.133	.028	.099	4.702	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_ud	1.000	1.000
2	(Constant)		
	Tpaths_ud	.028	35.308
	GD_ud	.028	35.308
3	(Constant)		
	Tpaths_ud	.013	76.712
	GD_ud	.002	519.804
	AvgPL_ud	.001	806.129
4	(Constant)		
	GD_ud	.003	371.030
	AvgPL_ud	.003	371.030

5	(Constant)		
	GD_ud	.003	385.879
	AvgPL_ud	.003	385.680
	PL_TpudN	.961	1.040
6	(Constant)		
	GD_ud	.003	389.723
	AvgPL_ud	.003	389.989
	PL_TpudN	.855	1.169
	Den_ud	.877	1.141
7	(Constant)		
	GD_ud	.002	424.462
	AvgPL_ud	.002	423.813
	PL_TpudN	.853	1.173
	Den_ud	.783	1.277
	S_ud	.822	1.217

a. Dependent Variable: EVCud\_TpudN

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
					Tolerance	VIF	Minimum Tolerance



1	Nodes	.042 <sup>b</sup>	.398	.692	.043	.977	1.023	.977
	Edges_ud	.032 <sup>b</sup>	.303	.763	.032	.979	1.021	.979
	Den_ud	-.049 <sup>b</sup>	-.464	.644	-.050	.965	1.036	.965
	CC_ud	-.012 <sup>b</sup>	-.115	.909	-.012	.998	1.002	.998
	GD_ud	4.111 <sup>b</sup>	9.458	.000	.712	.028	35.308	.028
	TSpaths_ud	.020 <sup>b</sup>	.187	.852	.020	.994	1.006	.994
	AvgPL_ud	3.707 <sup>b</sup>	5.612	.000	.516	.018	54.756	.018
	AvgGL_ud	-.006 <sup>b</sup>	-.056	.955	-.006	.959	1.043	.959
	PL_TpudN	.097 <sup>b</sup>	.938	.351	.100	1.000	1.000	1.000
	PL_TspudN	-.123 <sup>b</sup>	-1.186	.239	-.126	1.000	1.000	1.000
	S_ud	-.217 <sup>b</sup>	-2.106	.038	-.220	.970	1.031	.970
	R_ud	-.006 <sup>b</sup>	-.059	.953	-.006	.975	1.026	.975
	SMSP_ud	.013 <sup>b</sup>	.128	.899	.014	.994	1.006	.994
2	Nodes	.462 <sup>c</sup>	6.848	.000	.594	.770	1.298	.022
	Edges_ud	.456 <sup>c</sup>	6.698	.000	.586	.767	1.303	.022
	Den_ud	-.414 <sup>c</sup>	-5.979	.000	-.542	.798	1.253	.023
	CC_ud	-.062 <sup>c</sup>	-.846	.400	-.091	.993	1.007	.028
	TSpaths_ud	.394 <sup>c</sup>	5.638	.000	.519	.807	1.239	.023
	AvgPL_ud	-18.188 <sup>c</sup>	-25.311	.000	-.939	.001	806.129	.001
	AvgGL_ud	.027 <sup>c</sup>	.358	.721	.039	.957	1.045	.028
	PL_TpudN	.059 <sup>c</sup>	.805	.423	.087	.996	1.004	.028
	PL_TspudN	-.084 <sup>c</sup>	-1.144	.256	-.122	.997	1.003	.028

	S_ud	-.519 <sup>c</sup>	-9.175	.000	-.703	.856	1.168	.025
	R_ud	-.029 <sup>c</sup>	-.389	.699	-.042	.974	1.027	.028
	SMSP_ud	.039 <sup>c</sup>	.530	.598	.057	.992	1.008	.028
3	Nodes	.089 <sup>d</sup>	2.657	.009	.277	.539	1.855	.001
	Edges_ud	.091 <sup>d</sup>	2.777	.007	.288	.548	1.824	.001
	Den_ud	-.100 <sup>d</sup>	-3.291	.001	-.336	.623	1.605	.001
	CC_ud	.038 <sup>d</sup>	1.504	.136	.161	.969	1.032	.001
	TSpaths_ud	.057 <sup>d</sup>	1.769	.081	.188	.611	1.637	.001
	AvgGL_ud	.030 <sup>d</sup>	1.145	.255	.123	.957	1.045	.001
	PL_TpudN	-.095 <sup>d</sup>	-3.947	.000	-.394	.943	1.061	.001
	PL_TspudN	-.010 <sup>d</sup>	-.396	.693	-.043	.984	1.017	.001
	S_ud	.162 <sup>d</sup>	3.573	.001	.361	.275	3.640	.000
	R_ud	.071 <sup>d</sup>	2.860	.005	.296	.951	1.051	.001
	SMSP_ud	.050 <sup>d</sup>	2.003	.048	.212	.992	1.008	.001
4	Nodes	.035 <sup>e</sup>	1.394	.167	.149	.994	1.006	.003
	Edges_ud	.038 <sup>e</sup>	1.496	.138	.159	.995	1.005	.003
	Den_ud	-.052 <sup>e</sup>	-2.066	.042	-.217	.985	1.015	.003
	CC_ud	.040 <sup>e</sup>	1.611	.111	.171	.994	1.006	.003
	TSpaths_ud	.023 <sup>e</sup>	.899	.371	.096	.999	1.001	.003
	AvgGL_ud	.028 <sup>e</sup>	1.107	.272	.118	.960	1.042	.003
	PL_TpudN	-.096 <sup>e</sup>	-4.044	.000	-.400	.961	1.040	.003
	PL_TspudN	-.009 <sup>e</sup>	-.362	.718	-.039	.986	1.015	.003
	S_ud	.065 <sup>e</sup>	2.539	.013	.264	.924	1.083	.003

	R_ud	.073 <sup>e</sup>	2.945	.004	.303	.964	1.037	.003
	SMSP_ud	.050 <sup>e</sup>	1.990	.050	.210	.992	1.008	.003
	Tpaths_ud	-.166 <sup>e</sup>	-.751	.455	-.081	.013	76.712	.001
5	Nodes	.073 <sup>f</sup>	3.099	.003	.319	.892	1.121	.003
	Edges_ud	.071 <sup>f</sup>	3.053	.003	.314	.910	1.098	.003
	Den_ud	-.093 <sup>f</sup>	-4.085	.000	-.405	.877	1.141	.003
	CC_ud	.051 <sup>f</sup>	2.221	.029	.234	.983	1.018	.003
	TSpaths_ud	.048 <sup>f</sup>	2.056	.043	.218	.941	1.063	.003
	AvgGL_ud	.029 <sup>f</sup>	1.203	.232	.129	.960	1.042	.003
	PL_TspudN	.008 <sup>f</sup>	.342	.733	.037	.953	1.049	.003
	S_ud	.059 <sup>f</sup>	2.505	.014	.262	.920	1.087	.002
	R_ud	.055 <sup>f</sup>	2.307	.023	.243	.920	1.086	.003
	SMSP_ud	.077 <sup>f</sup>	3.388	.001	.345	.934	1.071	.003
	Tpaths_ud	-.053 <sup>f</sup>	-.257	.798	-.028	.013	78.214	.001
6	Nodes	-.114 <sup>g</sup>	-1.778	.079	-.190	.109	9.171	.003
	Edges_ud	-.045 <sup>g</sup>	-.940	.350	-.102	.199	5.021	.003
	CC_ud	.049 <sup>g</sup>	2.303	.024	.244	.982	1.019	.003
	TSpaths_ud	-.034 <sup>g</sup>	-1.075	.285	-.117	.453	2.206	.003
	AvgGL_ud	.007 <sup>g</sup>	.303	.763	.033	.901	1.110	.003
	PL_TspudN	.011 <sup>g</sup>	.506	.614	.055	.952	1.050	.003
	S_ud	.099 <sup>g</sup>	4.702	.000	.456	.822	1.217	.002
	R_ud	.040 <sup>g</sup>	1.781	.078	.191	.892	1.121	.003
	SMSP_ud	.054 <sup>g</sup>	2.396	.019	.253	.845	1.183	.003

	Tpaths_ud	-.808 <sup>g</sup>	-3.655	.000	-.370	.008	122.204	.001
7	Nodes	-.084 <sup>h</sup>	-1.449	.151	-.157	.108	9.290	.002
	Edges_ud	-.038 <sup>h</sup>	-.887	.378	-.097	.199	5.027	.002
	CC_ud	.011 <sup>h</sup>	.513	.609	.056	.796	1.256	.002
	TSpaths_ud	-.013 <sup>h</sup>	-.449	.654	-.049	.442	2.265	.002
	AvgGL_ud	-.002 <sup>h</sup>	-.101	.920	-.011	.893	1.120	.002
	PL_TspudN	.002 <sup>h</sup>	.125	.900	.014	.944	1.060	.002
	R_ud	.003 <sup>h</sup>	.119	.906	.013	.753	1.328	.002
	SMSP_ud	.011 <sup>h</sup>	.460	.647	.050	.661	1.513	.002
	Tpaths_ud	.143 <sup>h</sup>	.352	.726	.039	.002	442.907	.000

a. Dependent Variable: EVCud\_TpudN

b. Predictors in the Model: (Constant), Tpaths\_ud

c. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud

d. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

e. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud

f. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN

g. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN, Den\_ud

h. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud, PL\_TpudN, Den\_ud, S\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	Tpaths_ud	GD_ud
1	1	1.993	1.000	.00	.00	
	2	.007	17.463	1.00	1.00	
2	1	2.991	1.000	.00	.00	.00
	2	.009	18.176	.93	.01	.01
	3	.000	124.251	.07	.99	.99
3	1	3.989	1.000	.00	.00	.00
	2	.010	19.532	.62	.00	.00
	3	.000	137.251	.07	.53	.04
	4	1.076E-5	608.924	.31	.47	.96
4	1	2.990	1.000	.00		.00
	2	.010	17.620	.93		.00
	3	1.943E-5	392.340	.07		1.00
5	1	3.960	1.000	.00		.00
	2	.032	11.170	.00		.00
	3	.008	22.498	.98		.00
	4	1.868E-5	460.399	.02		1.00
6	1	4.917	1.000	.00		.00
	2	.050	9.908	.00		.00
	3	.028	13.172	.00		.00
	4	.005	31.259	1.00		.00
	5	1.849E-5	515.669	.00		1.00
7	1	5.904	1.000	.00		.00

2	.051	10.724	.00		.00
3	.029	14.316	.00		.00
4	.013	21.479	.01		.00
5	.003	41.312	.95		.00
6	1.699E-5	589.494	.04		1.00

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions			
		AvgPL_ud	PL_TpudN	Den_ud	S_ud
1	1				
	2				
2	1				
	2				
	3				
3	1	.00			
	2	.00			
	3	.00			
	4	.99			
4	1	.00			
	2	.00			
	3	1.00			
5	1	.00	.00		
	2	.00	.72		

	3	.00	.24		
	4	1.00	.04		
6	1	.00	.00	.00	
	2	.00	.20	.45	
	3	.00	.42	.14	
	4	.00	.34	.40	
	5	1.00	.05	.01	
7	1	.00	.00	.00	.00
	2	.00	.20	.35	.01
	3	.00	.39	.07	.01
	4	.00	.16	.48	.51
	5	.00	.19	.06	.39
	6	1.00	.05	.03	.08

a. Dependent Variable: EVCud\_TpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00923128798 6040	.01344509050 2501	.01106363412 6706	.00164148618 2659
Std. Predicted Value	-1.116	1.451	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000

Adjusted Predicted Value	.00926063209 7721	.01366733014 5836	.01107043541 5983	.00164909953 6235
Residual	- .00127085356 5075	.00055356859 2295	.00000000000 0000	.00029276947 8995
Std. Residual	-4.217	1.837	.000	.972
Stud. Residual	-4.571	1.890	-.009	1.034
Deleted Residual	- .00149309390 6902	.00062647031 1545	- .00000680128 9277	.00033760562 5873
Stud. Deleted Residual	-5.242	1.920	-.018	1.078
Mahal. Distance	.906	51.286	4.944	6.546
Cook's Distance	.000	1.171	.031	.139
Centered Leverage Value	.010	.576	.056	.074

#### Residuals Statistics<sup>a</sup>

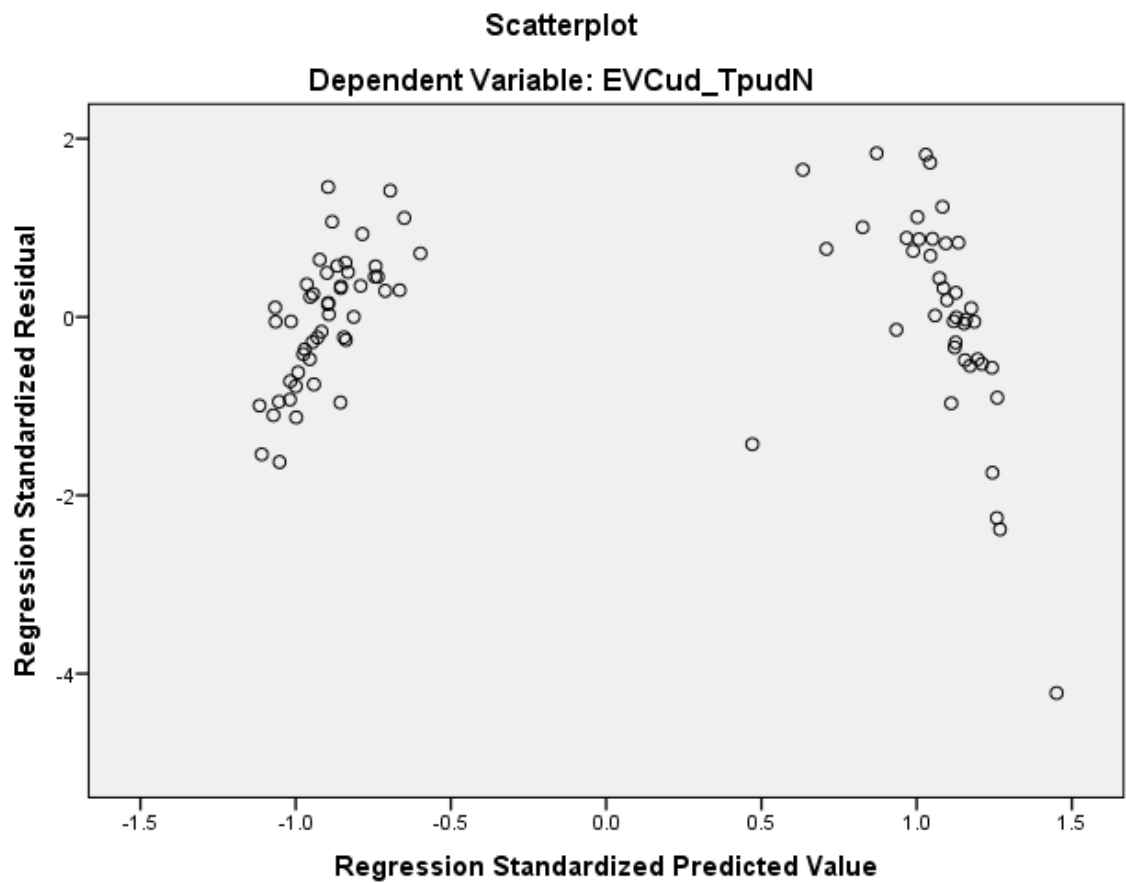
	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90



Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: EVCud\_TpudN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TpudN

/METHOD=STEPWISE Nodes Edges\_ud Den\_ud CC\_ud GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud  
AvgGL\_ud PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:39:06
Comments		
Input	Active Dataset	DataSet3
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	89
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCud_TpudN  /METHOD=STEPWISE Nodes Edges_ud Den_ud CC_ud GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.17
	Memory Required	16112 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_10	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Tpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	GD_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4		Tpaths_ud	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

5	Den_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
6	S_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
7	PL_TpudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCud\_TpudN

#### Model Summary<sup>h</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
-------	---	----------	-------------------	----------------------------

1	.239 <sup>a</sup>	.057	.046	.00163731448 6340
2	.732 <sup>b</sup>	.535	.524	.00115620950 4098
3	.979 <sup>c</sup>	.958	.957	.00034923652 6479
4	.979 <sup>d</sup>	.958	.957	.00034805037 1031
5	.981 <sup>e</sup>	.963	.961	.00032977672 7348
6	.984 <sup>f</sup>	.969	.967	.00030447643 7348
7	.985 <sup>g</sup>	.971	.969	.00029412838 5268

a. Predictors: (Constant), Tpaths\_ud

b. Predictors: (Constant), Tpaths\_ud, GD\_ud

c. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

d. Predictors: (Constant), GD\_ud, AvgPL\_ud

e. Predictors: (Constant), GD\_ud, AvgPL\_ud, Den\_ud

f. Predictors: (Constant), GD\_ud, AvgPL\_ud, Den\_ud, S\_ud

g. Predictors: (Constant), GD\_ud, AvgPL\_ud, Den\_ud, S\_ud,  
PL\_TpudN

h. Dependent Variable: EVCud\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	5.255	.024 <sup>b</sup>
	Residual	.000	87	.000		
	Total	.000	88			
2	Regression	.000	2	.000	49.502	.000 <sup>c</sup>
	Residual	.000	86	.000		
	Total	.000	88			
3	Regression	.000	3	.000	647.587	.000 <sup>d</sup>
	Residual	.000	85	.000		
	Total	.000	88			
4	Regression	.000	2	.000	977.803	.000 <sup>e</sup>
	Residual	.000	86	.000		
	Total	.000	88			
5	Regression	.000	3	.000	729.712	.000 <sup>f</sup>
	Residual	.000	85	.000		
	Total	.000	88			
6	Regression	.000	4	.000	645.943	.000 <sup>g</sup>
	Residual	.000	84	.000		
	Total	.000	88			
7	Regression	.000	5	.000	555.158	.000 <sup>h</sup>
	Residual	.000	83	.000		
	Total	.000	88			



- a. Dependent Variable: EVCud\_TpudN
- b. Predictors: (Constant), Tpaths\_ud
- c. Predictors: (Constant), Tpaths\_ud, GD\_ud
- d. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud
- e. Predictors: (Constant), GD\_ud, AvgPL\_ud
- f. Predictors: (Constant), GD\_ud, AvgPL\_ud, Den\_ud
- g. Predictors: (Constant), GD\_ud, AvgPL\_ud, Den\_ud, S\_ud
- h. Predictors: (Constant), GD\_ud, AvgPL\_ud, Den\_ud, S\_ud, PL\_TpudN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.015	.002		9.581	.000
	Tpaths_ud	-.315	.137	-.239	-2.292	.024
2	(Constant)	.016	.001		14.919	.000
	Tpaths_ud	-5.666	.577	-4.294	-9.817	.000
	GD_ud	5.183	.551	4.114	9.406	.000
3	(Constant)	.009	.000		23.687	.000
	Tpaths_ud	-.165	.256	-.125	-.646	.520
	GD_ud	23.377	.643	18.556	36.345	.000
	AvgPL_ud	-23.067	.788	-18.576	-29.285	.000

4	(Constant)	.009	.000		29.265	.000
	GD_ud	23.599	.542	18.732	43.559	.000
	AvgPL_ud	-23.439	.534	-18.876	-43.894	.000
5	(Constant)	.010	.000		27.563	.000
	GD_ud	23.688	.514	18.802	46.082	.000
	AvgPL_ud	-23.536	.507	-18.954	-46.439	.000
	Den_ud	-.051	.016	-.069	-3.286	.001
6	(Constant)	.009	.000		19.403	.000
	GD_ud	24.217	.493	19.222	49.123	.000
	AvgPL_ud	-24.050	.486	-19.368	-49.529	.000
	Den_ud	-.070	.015	-.095	-4.634	.000
	S_ud	.113	.029	.084	3.964	.000
7	(Constant)	.010	.001		18.172	.000
	GD_ud	24.449	.484	19.406	50.489	.000
	AvgPL_ud	-24.284	.477	-19.556	-50.875	.000
	Den_ud	-.086	.016	-.116	-5.431	.000
	S_ud	.124	.028	.092	4.440	.000
	PL_TpudN	-.065	.024	-.054	-2.649	.010

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		

	Tpaths_ud	1.000	1.000
2	(Constant)		
	Tpaths_ud	.028	35.393
	GD_ud	.028	35.393
3	(Constant)		
	Tpaths_ud	.013	76.482
	GD_ud	.002	528.536
	AvgPL_ud	.001	815.876
4	(Constant)		
	GD_ud	.003	377.559
	AvgPL_ud	.003	377.559
5	(Constant)		
	GD_ud	.003	378.601
	AvgPL_ud	.003	378.830
	Den_ud	.986	1.014
6	(Constant)		
	GD_ud	.002	408.483
	AvgPL_ud	.002	407.936
	Den_ud	.886	1.129
	S_ud	.839	1.192
7	(Constant)		
	GD_ud	.002	422.342
	AvgPL_ud	.002	422.426

Den_ud	.770	1.299
S_ud	.822	1.217
PL_TpudN	.853	1.172

a. Dependent Variable: EVCud\_TpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	.037 <sup>b</sup>	.353	.725	.038	.980	1.021	.980
	Edges_ud	.028 <sup>b</sup>	.264	.793	.028	.981	1.019	.981
	Den_ud	-.044 <sup>b</sup>	-.415	.679	-.045	.968	1.033	.968
	CC_ud	-.009 <sup>b</sup>	-.085	.932	-.009	.998	1.002	.998
	GD_ud	4.114 <sup>b</sup>	9.406	.000	.712	.028	35.393	.028
	TSpaths_ud	.017 <sup>b</sup>	.163	.871	.018	.995	1.005	.995
	AvgPL_ud	3.693 <sup>b</sup>	5.565	.000	.515	.018	54.635	.018
	AvgGL_ud	-.005 <sup>b</sup>	-.045	.964	-.005	.958	1.043	.958
	PL_TpudN	.104 <sup>b</sup>	.995	.322	.107	.998	1.002	.998
	PL_TspudN	-.136 <sup>b</sup>	-1.308	.194	-.140	1.000	1.000	1.000
	S_ud	-.214 <sup>b</sup>	-2.063	.042	-.217	.972	1.029	.972
	R_ud	.004 <sup>b</sup>	.034	.973	.004	.968	1.034	.968

	SMSP_ud	.014 <sup>b</sup>	.134	.894	.014	.993	1.007	.993
2	Nodes	.482 <sup>c</sup>	7.174	.000	.614	.755	1.324	.021
	Edges_ud	.473 <sup>c</sup>	6.960	.000	.602	.754	1.326	.021
	Den_ud	-.432 <sup>c</sup>	-6.259	.000	-.562	.784	1.275	.022
	CC_ud	-.065 <sup>c</sup>	-.881	.381	-.095	.991	1.009	.028
	TSpaths_ud	.403 <sup>c</sup>	5.741	.000	.529	.800	1.251	.023
	AvgPL_ud	-18.576 <sup>c</sup>	-29.285	.000	-.954	.001	815.876	.001
	AvgGL_ud	.026 <sup>c</sup>	.346	.730	.038	.957	1.045	.028
	PL_TpudN	.122 <sup>c</sup>	1.669	.099	.178	.997	1.003	.028
	PL_TspudN	-.079 <sup>c</sup>	-1.074	.286	-.116	.993	1.007	.028
	S_ud	-.536 <sup>c</sup>	-9.649	.000	-.723	.846	1.182	.024
	R_ud	-.038 <sup>c</sup>	-.504	.615	-.055	.964	1.037	.028
	SMSP_ud	.039 <sup>c</sup>	.521	.604	.056	.992	1.008	.028
3	Nodes	.112 <sup>d</sup>	4.028	.000	.402	.538	1.860	.001
	Edges_ud	.111 <sup>d</sup>	4.027	.000	.402	.547	1.827	.001
	Den_ud	-.124 <sup>d</sup>	-4.978	.000	-.477	.622	1.608	.001
	CC_ud	.030 <sup>d</sup>	1.348	.181	.146	.970	1.031	.001
	TSpaths_ud	.066 <sup>d</sup>	2.372	.020	.251	.611	1.636	.001
	AvgGL_ud	.027 <sup>d</sup>	1.170	.245	.127	.957	1.045	.001
	PL_TpudN	-.011 <sup>d</sup>	-.468	.641	-.051	.956	1.046	.001
	PL_TspudN	.021 <sup>d</sup>	.951	.344	.103	.970	1.031	.001
	S_ud	.136 <sup>d</sup>	3.408	.001	.349	.276	3.620	.000
	R_ud	.044 <sup>d</sup>	1.975	.052	.211	.950	1.053	.001

	SMSP_ud	.049 <sup>d</sup>	2.225	.029	.236	.992	1.008	.001
4	Nodes	.051 <sup>e</sup>	2.358	.021	.248	.994	1.006	.003
	Edges_ud	.052 <sup>e</sup>	2.389	.019	.251	.994	1.006	.003
	Den_ud	-.069 <sup>e</sup>	-3.286	.001	-.336	.986	1.014	.003
	CC_ud	.032 <sup>e</sup>	1.439	.154	.154	.994	1.006	.003
	TSpaths_ud	.031 <sup>e</sup>	1.418	.160	.152	.999	1.001	.003
	AvgGL_ud	.026 <sup>e</sup>	1.138	.258	.122	.959	1.043	.003
	PL_TpudN	-.013 <sup>e</sup>	-.568	.571	-.061	.982	1.018	.003
	PL_TspudN	.022 <sup>e</sup>	.991	.325	.107	.973	1.028	.003
	S_ud	.053 <sup>e</sup>	2.358	.021	.248	.933	1.072	.002
	R_ud	.045 <sup>e</sup>	2.045	.044	.217	.961	1.041	.003
	SMSP_ud	.048 <sup>e</sup>	2.217	.029	.234	.992	1.008	.003
	Tpaths_ud	-.125 <sup>e</sup>	-.646	.520	-.070	.013	76.482	.001
5	Nodes	-.127 <sup>f</sup>	-2.048	.044	-.218	.111	9.006	.003
	Edges_ud	-.050 <sup>f</sup>	-1.062	.291	-.115	.202	4.957	.003
	CC_ud	.027 <sup>f</sup>	1.276	.206	.138	.989	1.011	.003
	TSpaths_ud	-.043 <sup>f</sup>	-1.400	.165	-.151	.454	2.202	.003
	AvgGL_ud	.009 <sup>f</sup>	.422	.674	.046	.904	1.106	.003
	PL_TpudN	-.041 <sup>f</sup>	-1.839	.069	-.197	.871	1.148	.003
	PL_TspudN	.023 <sup>f</sup>	1.077	.285	.117	.973	1.028	.003
	S_ud	.084 <sup>f</sup>	3.964	.000	.397	.839	1.192	.002
	R_ud	.037 <sup>f</sup>	1.720	.089	.184	.944	1.059	.003
	SMSP_ud	.026 <sup>f</sup>	1.161	.249	.126	.858	1.166	.003

	Tpaths_ud	-.779 <sup>f</sup>	-3.604	.001	-.366	.008	121.241	.001
6	Nodes	-.102 <sup>g</sup>	-1.764	.081	-.190	.110	9.121	.002
	Edges_ud	-.043 <sup>g</sup>	-1.002	.319	-.109	.201	4.964	.002
	CC_ud	-.008 <sup>g</sup>	-.384	.702	-.042	.802	1.247	.002
	TSpaths_ud	-.025 <sup>g</sup>	-.868	.388	-.095	.442	2.263	.002
	AvgGL_ud	.002 <sup>g</sup>	.120	.905	.013	.898	1.114	.002
	PL_TpudN	-.054 <sup>g</sup>	-2.649	.010	-.279	.853	1.172	.002
	PL_TspudN	.014 <sup>g</sup>	.687	.494	.075	.959	1.043	.002
	R_ud	.009 <sup>g</sup>	.422	.674	.046	.818	1.222	.002
	SMSP_ud	-.016 <sup>g</sup>	-.674	.502	-.074	.670	1.492	.002
	Tpaths_ud	-.206 <sup>g</sup>	-.494	.623	-.054	.002	458.473	.000
7	Nodes	-.092 <sup>h</sup>	-1.644	.104	-.179	.109	9.164	.002
	Edges_ud	-.041 <sup>h</sup>	-.990	.325	-.109	.201	4.965	.002
	CC_ud	.002 <sup>h</sup>	.104	.918	.011	.773	1.294	.002
	TSpaths_ud	-.020 <sup>h</sup>	-.692	.491	-.076	.439	2.277	.002
	AvgGL_ud	-.001 <sup>h</sup>	-.066	.948	-.007	.893	1.120	.002
	PL_TspudN	.012 <sup>h</sup>	.614	.541	.068	.957	1.044	.002
	R_ud	.000 <sup>h</sup>	-.001	.999	.000	.796	1.257	.002
	SMSP_ud	-.001 <sup>h</sup>	-.035	.972	-.004	.628	1.593	.002
	Tpaths_ud	-.070 <sup>h</sup>	-.172	.864	-.019	.002	466.237	.000

a. Dependent Variable: EVCud\_TpudN

b. Predictors in the Model: (Constant), Tpaths\_ud

- c. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud
- d. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud
- e. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud
- f. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud, Den\_ud
- g. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud, Den\_ud, S\_ud
- h. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud, Den\_ud, S\_ud, PL\_TpudN

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Tpaths_ud	GD_ud
1	1	1.993	1.000	.00	.00	
	2	.007	17.393	1.00	1.00	
2	1	2.991	1.000	.00	.00	.00
	2	.009	18.111	.93	.01	.01
	3	.000	123.952	.06	.99	.99
3	1	3.989	1.000	.00	.00	.00
	2	.011	19.462	.61	.00	.00
	3	.000	136.799	.07	.53	.04
	4	1.069E-5	610.914	.32	.47	.96
4	1	2.990	1.000	.00		.00
	2	.010	17.560	.93		.00
	3	1.922E-5	394.439	.07		1.00



5	1	3.953	1.000	.00		.00
	2	.040	9.988	.00		.00
	3	.007	23.346	.96		.00
	4	1.916E-5	454.203	.04		1.00
6	1	4.941	1.000	.00		.00
	2	.040	11.081	.00		.00
	3	.015	18.191	.03		.00
	4	.004	34.269	.87		.00
	5	1.777E-5	527.301	.10		1.00
7	1	5.921	1.000	.00		.00
	2	.043	11.737	.00		.00
	3	.024	15.852	.00		.00
	4	.010	24.372	.00		.00
	5	.003	44.816	.97		.00
	6	1.718E-5	587.120	.03		1.00

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions			
		AvgPL_ud	Den_ud	S_ud	PL_TpudN
1	1				
	2				
2	1				
	2				

	3				
3	1	.00			
	2	.00			
	3	.01			
	4	.99			
4	1	.00			
	2	.00			
	3	1.00			
5	1	.00	.00		
	2	.00	.69		
	3	.00	.31		
	4	1.00	.00		
6	1	.00	.00	.00	
	2	.00	.54	.00	
	3	.00	.43	.38	
	4	.00	.01	.54	
	5	1.00	.02	.07	
7	1	.00	.00	.00	.00
	2	.00	.50	.00	.03
	3	.00	.02	.04	.25
	4	.00	.32	.66	.31
	5	.00	.12	.21	.37
	6	1.00	.04	.08	.03

a. Dependent Variable: EVCud\_TpudN

**Residuals Statistics<sup>a</sup>**

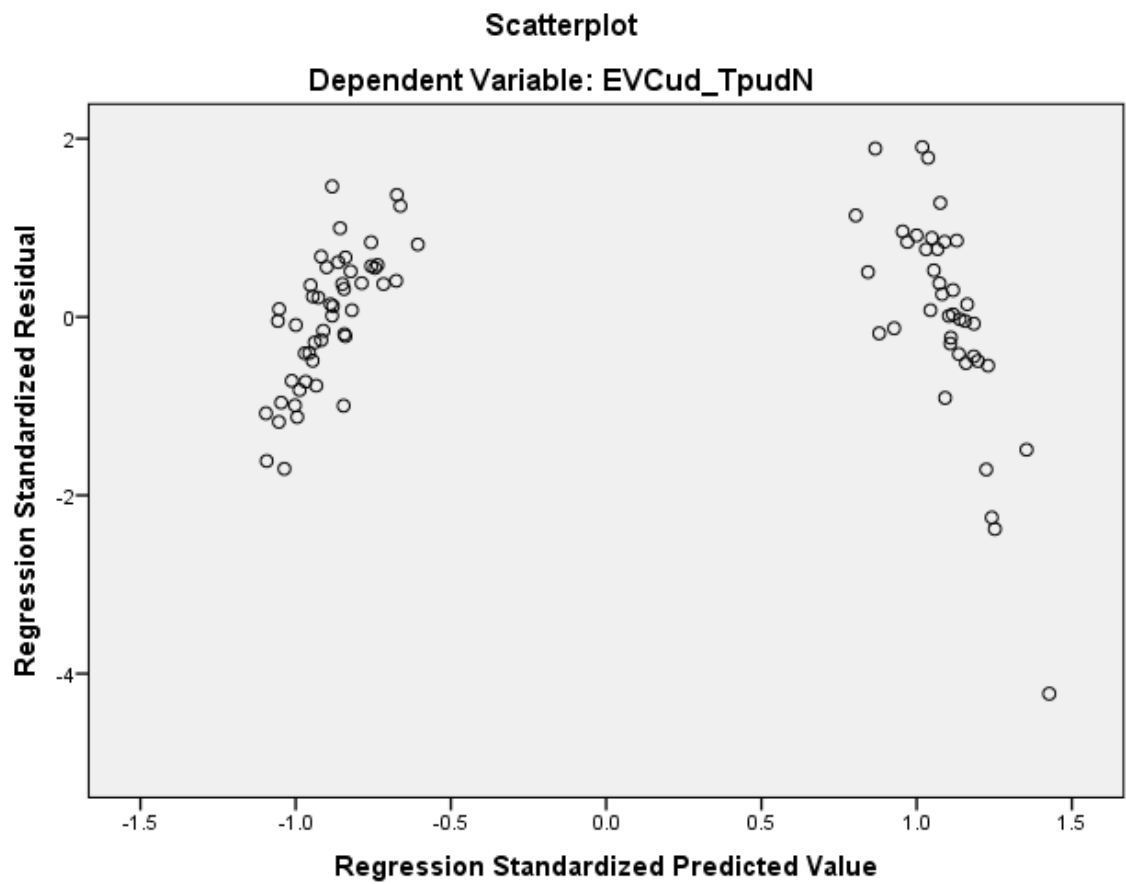
	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00924978312 1049	.01341707631 9456	.01105978539 8304	.00165191996 1687
Std. Predicted Value	-1.096	1.427	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00928123295 3072	.01363742910 3255	.01106207046 3812	.00165753628 6331
Residual	- .00124284008 0522	.00056051538 5587	.00000000000 0000	.00028565027 6537
Std. Residual	-4.226	1.906	.000	.971
Stud. Residual	-4.585	1.979	-.004	1.022
Deleted Residual	- .00146319216 5829	.00060458679 2178	- .00000228506 5508	.00031739220 8654
Stud. Deleted Residual	-5.274	2.015	-.013	1.066
Mahal. Distance	.889	41.083	4.944	6.484
Cook's Distance	.000	.621	.020	.074
Centered Leverage Value	.010	.467	.056	.074

### Residuals Statistics<sup>a</sup>

	N
Predicted Value	89
Std. Predicted Value	89
Standard Error of Predicted Value	89
Adjusted Predicted Value	89
Residual	89
Std. Residual	89
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	89
Cook's Distance	89
Centered Leverage Value	89

a. Dependent Variable: EVCud\_TpudN

### Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECud

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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	Weight	<none>
	Split File	<none>
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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
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		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT ECud
		/METHOD=STEPWISE GD_ud
		Tpaths_ud TSpats_ud AvgPL_ud
		AvgGL_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
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	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_1	
Modified		Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
-------	----------------------	----------------------	--------

1	TSpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	------------	--	--

a. Dependent Variable: ECud

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.269 <sup>a</sup>	.072	.062	.00453219296 3873

a. Predictors: (Constant), TSpaths\_ud

b. Dependent Variable: ECud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	6.928	.010 <sup>b</sup>
	Residual	.002	89	.000		



Total	.002	90			
-------	------	----	--	--	--

a. Dependent Variable: ECud

b. Predictors: (Constant), TSpats\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.032	.008		4.020	.000
TSpats_ud	-1.886	.716	-.269	-2.632	.010

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
TSpats_ud	1.000	1.000

a. Dependent Variable: ECud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	-.047 <sup>b</sup>	-.463	.645	-.049	1.000	1.000
	Tpaths_ud	-.050 <sup>b</sup>	-.489	.626	-.052	.987	1.013
	AvgPL_ud	-.051 <sup>b</sup>	-.501	.617	-.053	1.000	1.000
	AvgGL_ud	-.074 <sup>b</sup>	-.641	.523	-.068	.787	1.270

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	1.000	
	Tpaths_ud	.987	
	AvgPL_ud	1.000	
	AvgGL_ud	.787	

a. Dependent Variable: ECud

b. Predictors in the Model: (Constant), TSpats\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpats_ud

1	1	1.998	1.000	.00	.00
	2	.002	33.175	1.00	1.00

a. Dependent Variable: ECud

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00649468274 7871	.01299989037 2157	.01098901098 9011	.00125742849 9041
Std. Predicted Value	-3.574	1.599	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00584005471 3190	.01322481874 3765	.01098608349 2271	.00128086235 7440
Residual	- .00810970366 0011	.00733921863 1387	.00000000000 0000	.00450694378 1542
Std. Residual	-1.789	1.619	.000	.994
Stud. Residual	-1.823	1.644	.000	1.004
Deleted Residual	- .00842135213 3155	.00756708672 2702	.00000292749 6740	.00459441415 8907
Stud. Deleted Residual	-1.848	1.660	.000	1.008
Mahal. Distance	.000	12.775	.989	1.797
Cook's Distance	.000	.068	.010	.011

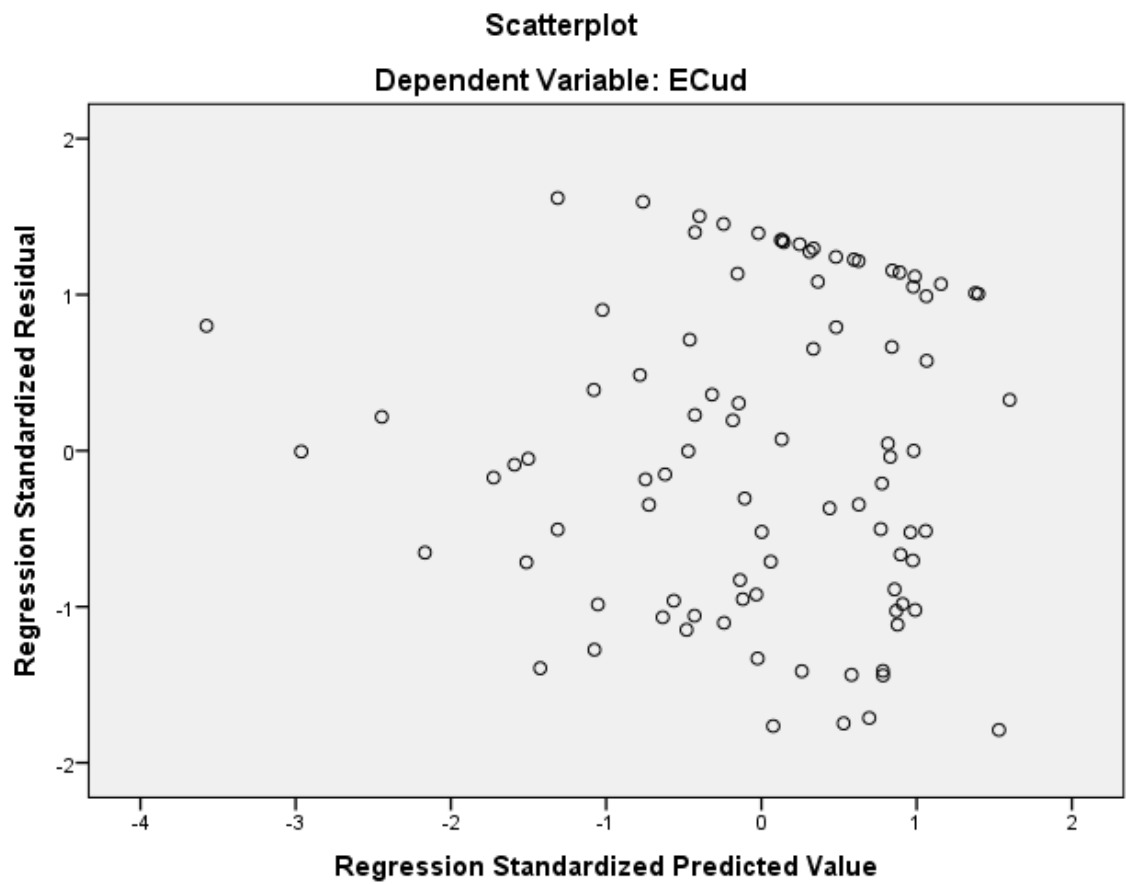
Centered Leverage Value	.000	.142	.011	.020
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# Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECud

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_EVCudN

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:30:25
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_EVCudN
		/METHOD=STEPWISE GD_ud
		Tpaths_ud TSpats_ud AvgPL_ud
		AvgGL_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.20
	Memory Required	5920 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or Modified	COO_2	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	AvgGL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	----------	--	--

a. Dependent Variable: PL\_EVCudN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.236 <sup>a</sup>	.056	.045	.00201639834 9053

a. Predictors: (Constant), AvgGL\_ud

b. Dependent Variable: PL\_EVCudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	5.272	.024 <sup>b</sup>
	Residual	.000	89	.000		



Total	.000	90			
-------	------	----	--	--	--

a. Dependent Variable: PL\_EVCudN

b. Predictors: (Constant), AvgGL\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.015	.002		9.093	.000
AvgGL_ud	-.334	.145	-.236	-2.296	.024

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
AvgGL_ud	1.000	1.000

a. Dependent Variable: PL\_EVCudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	-.038 <sup>b</sup>	-.357	.722	-.038	.964	1.038
	Tpaths_ud	.018 <sup>b</sup>	.167	.868	.018	.960	1.042
	TSpaths_ud	.074 <sup>b</sup>	.635	.527	.068	.787	1.270
	AvgPL_ud	-.029 <sup>b</sup>	-.273	.786	-.029	.962	1.039

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	.964	
	Tpaths_ud	.960	
	TSpaths_ud	.787	
	AvgPL_ud	.962	

a. Dependent Variable: PL\_EVCudN

b. Predictors in the Model: (Constant), AvgGL\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	AvgGL_ud

1	1	1.991	1.000	.00	.00
	2	.009	15.188	1.00	1.00

a. Dependent Variable: PL\_EVCudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00935835670 6798	.01200177613 6458	.01098901098 9011	.00048803485 9151
Std. Predicted Value	-3.341	2.075	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00950972270 2205	.01206079591 0656	.01099329920 1643	.00047976618 1507
Residual	- .00320300459 8618	.00654249358 9222	.00000000000 0000	.00200516484 4660
Std. Residual	-1.588	3.245	.000	.994
Stud. Residual	-1.598	3.275	-.001	1.004
Deleted Residual	- .00324110523 7976	.00666707893 8335	- .00000428821 2632	.00204421527 7740
Stud. Deleted Residual	-1.612	3.473	.002	1.018
Mahal. Distance	.000	11.164	.989	1.927
Cook's Distance	.000	.102	.010	.015

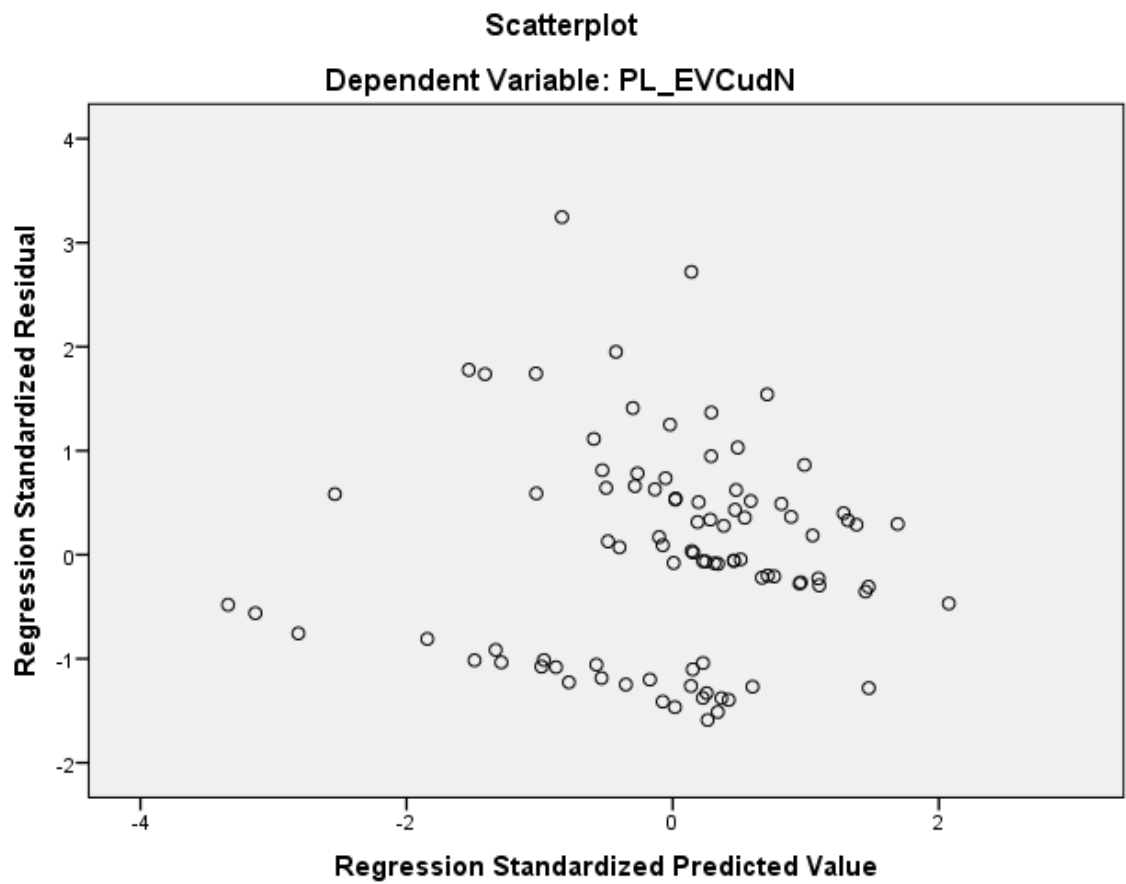
Centered Leverage Value	.000	.124	.011	.021
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# Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_EVCudN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TpudN

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:30:42
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT EVCud_TpudN
		/METHOD=STEPWISE GD_ud
		Tpaths_ud TSpaths_ud AvgPL_ud
		AvgGL_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.22
	Memory Required	5952 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_3	
Modified		Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	Tpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	GD_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	TSpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCud\_TpudN



**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.298 <sup>a</sup>	.089	.079	.00173193241 2847
2	.691 <sup>b</sup>	.478	.466	.00131833672 6049
3	.971 <sup>c</sup>	.942	.940	.00044117769 2690
4	.975 <sup>d</sup>	.951	.948	.00041015401 2371

a. Predictors: (Constant), Tpaths\_ud

b. Predictors: (Constant), Tpaths\_ud, GD\_ud

c. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

d. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, TSpaths\_ud

e. Dependent Variable: EVCud\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	8.695	.004 <sup>b</sup>
	Residual	.000	89	.000		

	Total	.000	90			
2	Regression	.000	2	.000	40.304	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	472.862	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.000	90			
4	Regression	.000	4	.000	413.991	.000 <sup>e</sup>
	Residual	.000	86	.000		
	Total	.000	90			

a. Dependent Variable: EVCud\_TpudN

b. Predictors: (Constant), Tpaths\_ud

c. Predictors: (Constant), Tpaths\_ud, GD\_ud

d. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

e. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, TSpats\_ud

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.016	.002		9.950	.000

	Tpaths_ud	-.417	.141	-.298	-2.949	.004
2	(Constant)	.015	.001		12.335	.000
	Tpaths_ud	-3.035	.341	-2.170	-8.909	.000
	GD_ud	2.693	.332	1.973	8.100	.000
3	(Constant)	.011	.000		25.182	.000
	Tpaths_ud	-1.441	.129	-1.031	-11.175	.000
	GD_ud	21.364	.715	15.655	29.879	.000
	AvgPL_ud	-19.902	.753	-14.784	-26.435	.000
4	(Constant)	.008	.001		9.724	.000
	Tpaths_ud	-1.640	.131	-1.173	-12.552	.000
	GD_ud	21.101	.668	15.463	31.577	.000
	AvgPL_ud	-19.461	.709	-14.456	-27.434	.000
	TSpaths_ud	.271	.071	.100	3.829	.000

#### Coefficients<sup>a</sup>

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tpaths_ud	1.000	1.000
2	(Constant)		
	Tpaths_ud	.100	10.007
	GD_ud	.100	10.007
3	(Constant)		

	Tpaths_ud	.078	12.806
	GD_ud	.002	413.350
	AvgPL_ud	.002	470.893
4	(Constant)		
	Tpaths_ud	.066	15.202
	GD_ud	.002	417.737
	AvgPL_ud	.002	483.663
	TSpaths_ud	.841	1.189

a. Dependent Variable: EVCud\_TpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	1.973 <sup>b</sup>	8.100	.000	.654	.100	10.007
	TSpaths_ud	-.033 <sup>b</sup>	-.319	.750	-.034	.987	1.013
	AvgPL_ud	1.723 <sup>b</sup>	5.933	.000	.535	.088	11.400
	AvgGL_ud	.006 <sup>b</sup>	.061	.951	.007	.960	1.042
2	TSpaths_ud	.216 <sup>c</sup>	2.705	.008	.279	.864	1.158
	AvgPL_ud	-14.784 <sup>c</sup>	-26.435	.000	-.943	.002	470.893
	AvgGL_ud	.004 <sup>c</sup>	.045	.964	.005	.960	1.042
3	TSpaths_ud	.100 <sup>d</sup>	3.829	.000	.382	.841	1.189

	AvgGL_ud	.032 <sup>d</sup>	1.204	.232	.129	.958	1.043
4	AvgGL_ud	-.020 <sup>e</sup>	-.703	.484	-.076	.721	1.386

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.100
	TSpaths_ud	.987
	AvgPL_ud	.088
	AvgGL_ud	.960
2	TSpaths_ud	.086
	AvgPL_ud	.002
	AvgGL_ud	.100
3	TSpaths_ud	.002
	AvgGL_ud	.002
4	AvgGL_ud	.002

a. Dependent Variable: EVCud\_TpudN

b. Predictors in the Model: (Constant), Tpaths\_ud

c. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud

d. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

e. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud, TSpaths\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Tpaths_ud	GD_ud
1	1	1.993	1.000	.00	.00	
	2	.007	17.184	1.00	1.00	
2	1	2.990	1.000	.00	.00	.00
	2	.009	18.241	.99	.02	.03
	3	.001	65.067	.01	.98	.97
3	1	3.989	1.000	.00	.00	.00
	2	.010	19.638	.85	.01	.00
	3	.001	67.633	.02	.83	.01
	4	1.625E-5	495.470	.13	.17	.99
4	1	4.980	1.000	.00	.00	.00
	2	.017	16.891	.04	.01	.00
	3	.002	51.590	.73	.05	.00
	4	.001	85.091	.23	.76	.01
	5	1.594E-5	558.885	.00	.18	.99

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions	
		AvgPL_ud	TSpaths_ud
1	1		

	2		
2	1		
	2		
	3		
3	1	.00	
	2	.00	
	3	.00	
	4	1.00	
4	1	.00	.00
	2	.00	.06
	3	.00	.60
	4	.00	.32
	5	.99	.02

a. Dependent Variable: EVCud\_TpudN

# Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00465308874 8455	.01331773027 7777	.01098901098 9011	.00175934476 7580
Std. Predicted Value	-3.601	1.324	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000

Adjusted Predicted Value	.00774677470 3264	.01335016824 3051	.01102398211 8260	.00166542327 4622
Residual	- .00181479263 1194	.00078896083 8690	.00000000000 0000	.00040093589 1139
Std. Residual	-4.425	1.924	.000	.978
Stud. Residual	-4.529	1.954	-.022	1.038
Deleted Residual	- .00347384600 9001	.00081540580 1404	- .00003497112 9249	.00055474609 2951
Stud. Deleted Residual	-5.160	1.987	-.030	1.079
Mahal. Distance	.869	79.162	3.956	8.510
Cook's Distance	.000	12.777	.150	1.339
Centered Leverage Value	.010	.880	.044	.095

#### Residuals Statistics<sup>a</sup>

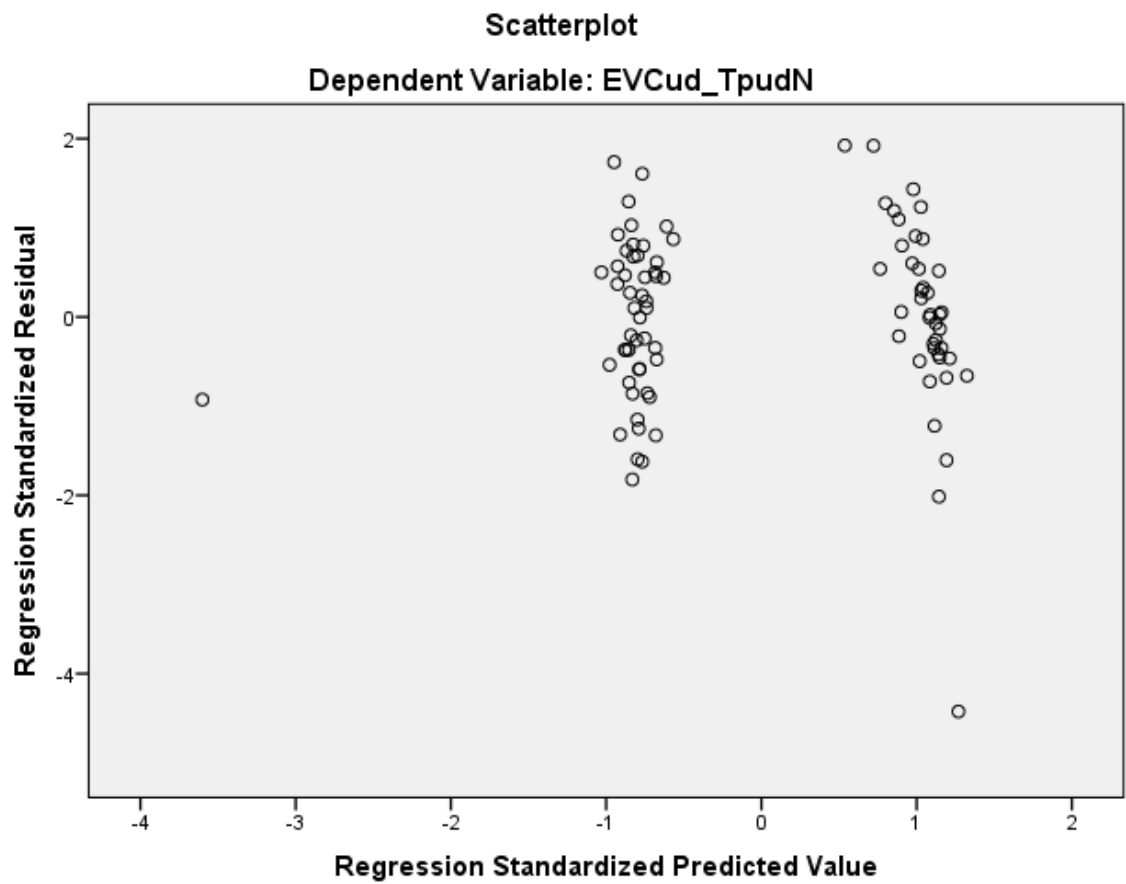
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91



Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: EVCud\_TpudN

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TSpudN

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:31:12
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCud_TSpudN  /METHOD=STEPWISE GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03
	Memory Required	6000 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance

### Warnings

No variables were entered into the equation.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TpudN

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpats\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:32:06
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>

Missing Value Handling	Split File	<none>
	N of Rows in Working Data File	90
	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCud_TpudN  /METHOD=STEPWISE GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.21
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Created or Modified	COO_5	Cook's Distance
-------------------------------	-------	-----------------

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Tpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	GD_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

4		. Tpaths_ud	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	--	-------------	--

a. Dependent Variable: EVCud\_TpudN

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.237 <sup>a</sup>	.056	.045	.00162923721 1454
2	.731 <sup>b</sup>	.535	.524	.00115058078 0462
3	.972 <sup>c</sup>	.945	.943	.00039811468 2009
4	.972 <sup>d</sup>	.945	.943	.00039711562 4789

a. Predictors: (Constant), Tpaths\_ud

b. Predictors: (Constant), Tpaths\_ud, GD\_ud

c. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

d. Predictors: (Constant), GD\_ud, AvgPL\_ud



e. Dependent Variable: EVCud\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	5.217	.025 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			
2	Regression	.000	2	.000	49.955	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.000	89			
3	Regression	.000	3	.000	491.721	.000 <sup>d</sup>
	Residual	.000	86	.000		
	Total	.000	89			
4	Regression	.000	2	.000	741.014	.000 <sup>e</sup>
	Residual	.000	87	.000		
	Total	.000	89			

a. Dependent Variable: EVCud\_TpudN

b. Predictors: (Constant), Tpaths\_ud

c. Predictors: (Constant), Tpaths\_ud, GD\_ud

d. Predictors: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud

e. Predictors: (Constant), GD\_ud, AvgPL\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.014	.002		9.623	.000
	Tpaths_ud	-.312	.136	-.237	-2.284	.025
2	(Constant)	.016	.001		15.019	.000
	Tpaths_ud	-5.647	.572	-4.289	-9.867	.000
	GD_ud	5.162	.546	4.111	9.458	.000
3	(Constant)	.010	.000		21.390	.000
	Tpaths_ud	-.219	.292	-.166	-.751	.455
	GD_ud	22.869	.725	18.211	31.560	.000
	AvgPL_ud	-22.527	.890	-18.188	-25.311	.000
4	(Constant)	.009	.000		26.268	.000
	GD_ud	23.160	.611	18.443	37.927	.000
	AvgPL_ud	-23.018	.602	-18.585	-38.218	.000

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF

1	(Constant)		
	Tpaths_ud	1.000	1.000
2	(Constant)		
	Tpaths_ud	.028	35.308
	GD_ud	.028	35.308
3	(Constant)		
	Tpaths_ud	.013	76.712
	GD_ud	.002	519.804
	AvgPL_ud	.001	806.129
4	(Constant)		
	GD_ud	.003	371.030
	AvgPL_ud	.003	371.030

a. Dependent Variable: EVCud\_TpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	4.111 <sup>b</sup>	9.458	.000	.712	.028	35.308
	TSpaths_ud	.020 <sup>b</sup>	.187	.852	.020	.994	1.006
	AvgPL_ud	3.707 <sup>b</sup>	5.612	.000	.516	.018	54.756
	AvgGL_ud	-.006 <sup>b</sup>	-.056	.955	-.006	.959	1.043

2	TSpaths_ud	.394 <sup>c</sup>	5.638	.000	.519	.807	1.239
	AvgPL_ud	-18.188 <sup>c</sup>	-25.311	.000	-.939	.001	806.129
	AvgGL_ud	.027 <sup>c</sup>	.358	.721	.039	.957	1.045
3	TSpaths_ud	.057 <sup>d</sup>	1.769	.081	.188	.611	1.637
	AvgGL_ud	.030 <sup>d</sup>	1.145	.255	.123	.957	1.045
4	TSpaths_ud	.023 <sup>e</sup>	.899	.371	.096	.999	1.001
	AvgGL_ud	.028 <sup>e</sup>	1.107	.272	.118	.960	1.042
	Tpaths_ud	-.166 <sup>e</sup>	-.751	.455	-.081	.013	76.712

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.028
	TSpaths_ud	.994
	AvgPL_ud	.018
	AvgGL_ud	.959
2	TSpaths_ud	.023
	AvgPL_ud	.001
	AvgGL_ud	.028
3	TSpaths_ud	.001
	AvgGL_ud	.001
4	TSpaths_ud	.003
	AvgGL_ud	.003

Tpaths_ud	.001
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- a. Dependent Variable: EVCud\_TpudN
- b. Predictors in the Model: (Constant), Tpaths\_ud
- c. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud
- d. Predictors in the Model: (Constant), Tpaths\_ud, GD\_ud, AvgPL\_ud
- e. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Tpaths_ud	GD_ud
1	1	1.993	1.000	.00	.00	
	2	.007	17.463	1.00	1.00	
2	1	2.991	1.000	.00	.00	.00
	2	.009	18.176	.93	.01	.01
	3	.000	124.251	.07	.99	.99
3	1	3.989	1.000	.00	.00	.00
	2	.010	19.532	.62	.00	.00
	3	.000	137.251	.07	.53	.04
	4	1.076E-5	608.924	.31	.47	.96
4	1	2.990	1.000	.00		.00
	2	.010	17.620	.93		.00

3	1.943E-5	392.340	.07		1.00
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**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions
		AvgPL_ud
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.00
	3	.00
	4	.99
4	1	.00
	2	.00
	3	1.00

a. Dependent Variable: EVCud\_TpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
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Predicted Value	.00957826245 5761	.01363666448 7422	.01106363412 6706	.00162050420 3906
Std. Predicted Value	-.917	1.588	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00954341981 5600	.01366872899 2343	.01106361947 0535	.00162040867 5997
Residual	- .00178002135 3625	.00076898047 7005	.00000000000 0000	.00039262829 8537
Std. Residual	-4.482	1.936	.000	.989
Stud. Residual	-4.576	1.982	.000	1.006
Deleted Residual	- .00185504078 3994	.00080581492 5116	.00000001465 6171	.00040646059 5156
Stud. Deleted Residual	-5.221	2.017	-.008	1.046
Mahal. Distance	.560	20.410	1.978	2.333
Cook's Distance	.000	.294	.012	.033
Centered Leverage Value	.006	.229	.022	.026

#### Residuals Statistics<sup>a</sup>

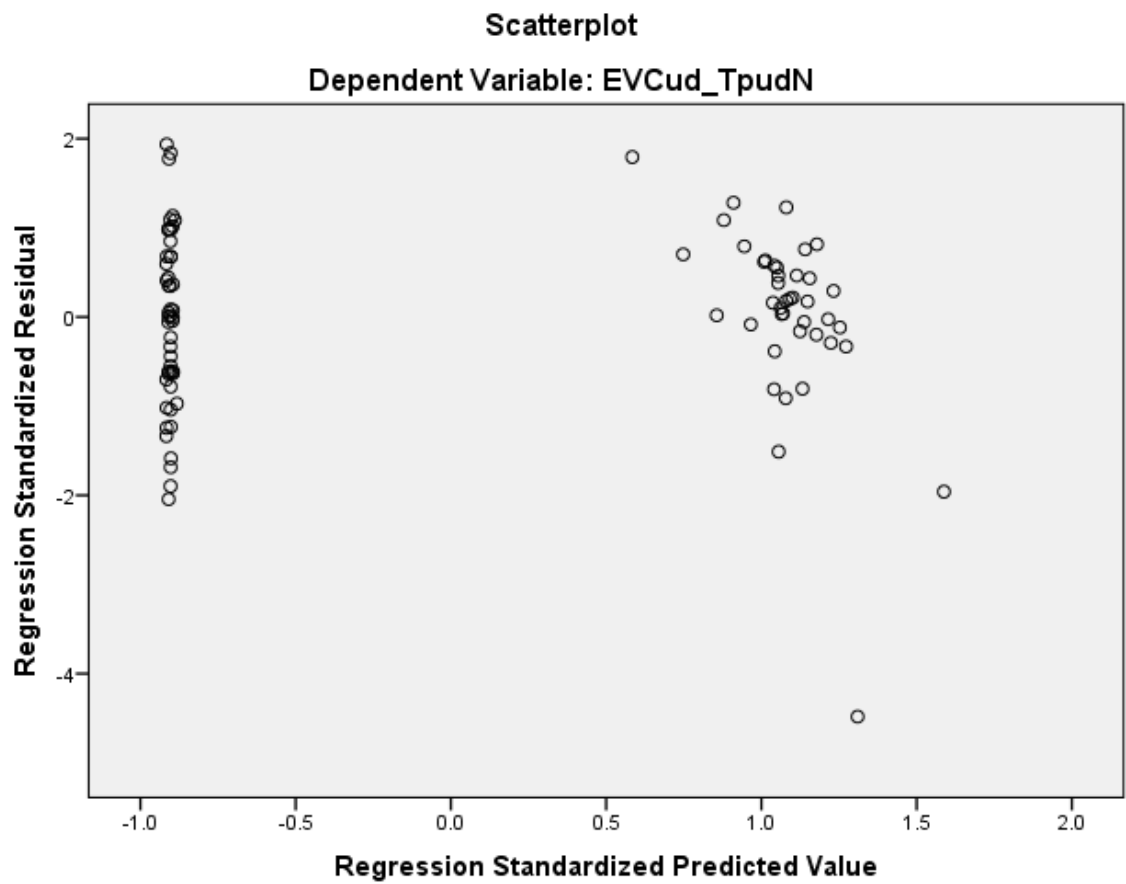
	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90

Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90
Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: EVCud\_TpudN

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_TpudN

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:26:04
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_TpudN
		/METHOD=STEPWISE GD_ud
		Tpaths_ud TSpaths_ud AvgPL_ud
		AvgGL_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.19
	Memory Required	6080 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_6	Cook's Distance
Modified		

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	TSpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: PL\_TpudN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.225 <sup>a</sup>	.051	.040	.00202757753 1572

a. Predictors: (Constant), TSpaths\_ud

b. Dependent Variable: PL\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	4.748	.032 <sup>b</sup>
	Residual	.000	89	.000		

Total	.000	90			
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a. Dependent Variable: PL\_TpudN

b. Predictors: (Constant), TSpaths\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.003	.004		.939	.350
TSpaths_ud	.698	.321	.225	2.179	.032

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
TSpaths_ud	1.000	1.000

a. Dependent Variable: PL\_TpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.033 <sup>b</sup>	.320	.750	.034	1.000	1.000
	Tpaths_ud	-.011 <sup>b</sup>	-.108	.914	-.012	.987	1.013
	AvgPL_ud	.022 <sup>b</sup>	.216	.830	.023	1.000	1.000
	AvgGL_ud	-.140 <sup>b</sup>	-1.201	.233	-.127	.787	1.270

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	1.000	
	Tpaths_ud	.987	
	AvgPL_ud	1.000	
	AvgGL_ud	.787	

a. Dependent Variable: PL\_TpudN

b. Predictors in the Model: (Constant), TSpats\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpats_ud

1	1	1.998	1.000	.00	.00
	2	.002	33.175	1.00	1.00

a. Dependent Variable: PL\_TpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01024421583 8611	.01265363395 2141	.01098901098 9011	.00046573008 0445
Std. Predicted Value	-1.599	3.574	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.01024500187 4864	.01259555295 1097	.01099126858 4986	.00047051063 9097
Residual	- .00185590819 4557	.01431141234 9343	.00000000000 0000	.00201628174 7127
Std. Residual	-.915	7.058	.000	.994
Stud. Residual	-.969	7.113	-.001	1.004
Deleted Residual	- .00208202376 9617	.01453329902 1423	- .00000225759 5975	.00205481948 7877
Stud. Deleted Residual	-.969	10.767	.048	1.340
Mahal. Distance	.000	12.775	.989	1.797
Cook's Distance	.000	.392	.010	.045

Centered Leverage Value	.000	.142	.011	.020
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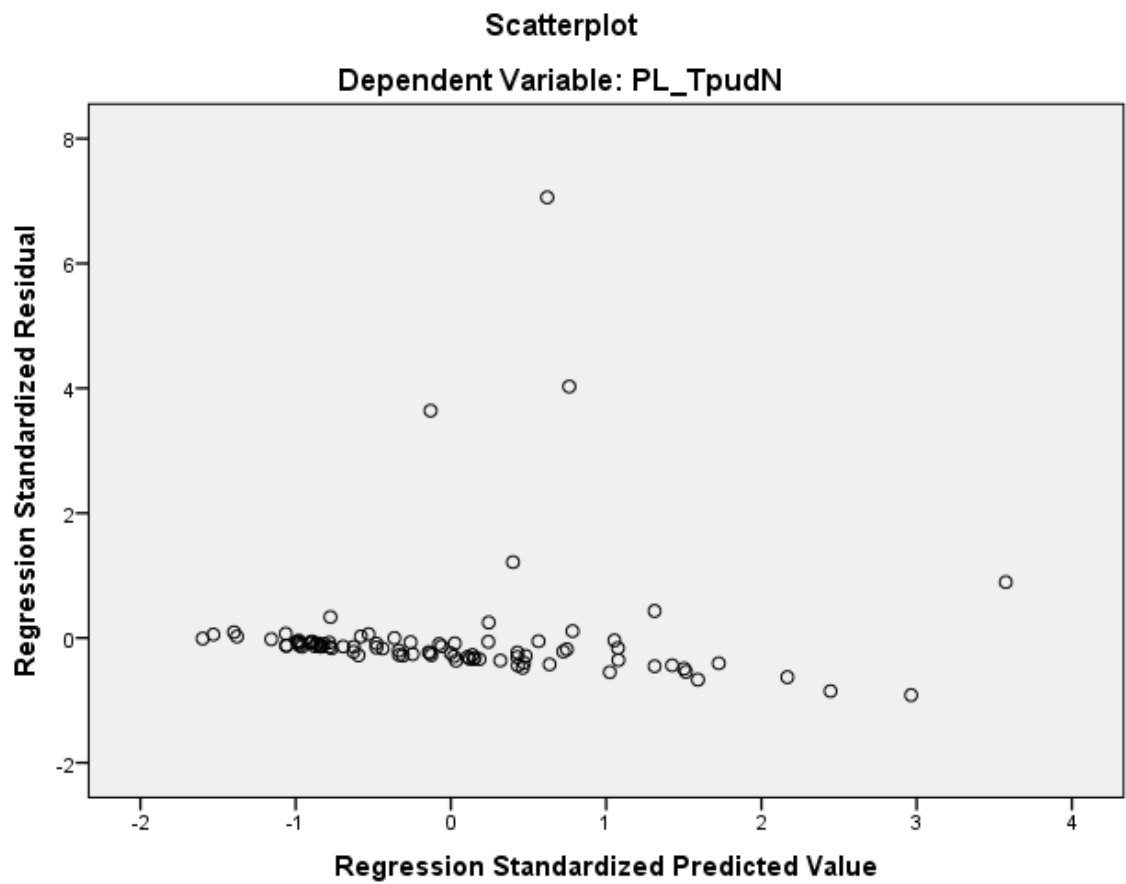
# Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_TpudN

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL\_TspudN

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:26:20
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT PL_TspudN
		/METHOD=STEPWISE GD_ud
		Tpaths_ud TSpats_ud AvgPL_ud
		AvgGL_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Memory Required	6112 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_7	
Modified		Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
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1	AvgGL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: PL\_TspudN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.339 <sup>a</sup>	.115	.105	.00230577179 8691

a. Predictors: (Constant), AvgGL\_ud

b. Dependent Variable: PL\_TspudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	11.589	.001 <sup>b</sup>
	Residual	.000	89	.000		

Total	.001	90			
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a. Dependent Variable: PL\_TspudN

b. Predictors: (Constant), AvgGL\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.017	.002		9.336	.000
AvgGL_ud	-.566	.166	-.339	-3.404	.001

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
AvgGL_ud	1.000	1.000

a. Dependent Variable: PL\_TspudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.069 <sup>b</sup>	.676	.501	.072	.964	1.038
	Tpaths_ud	.061 <sup>b</sup>	.594	.554	.063	.960	1.042
	TSpaths_ud	-.152 <sup>b</sup>	-1.357	.178	-.143	.787	1.270
	AvgPL_ud	.076 <sup>b</sup>	.746	.458	.079	.962	1.039

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	.964	
	Tpaths_ud	.960	
	TSpaths_ud	.787	
	AvgPL_ud	.962	

a. Dependent Variable: PL\_TspudN

b. Predictors in the Model: (Constant), AvgGL\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	AvgGL_ud

1	1	1.991	1.000	.00	.00
	2	.009	15.188	1.00	1.00

a. Dependent Variable: PL\_TspudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00822441652 4172	.01270604319 8705	.01098901098 9011	.00082740945 8132
Std. Predicted Value	-3.341	2.075	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00836577825 2482	.01246486045 4202	.01098577279 7661	.00082782637 9005
Residual	- .00359501107 5959	.00654530851 1704	.00000000000 0000	.00229292617 3400
Std. Residual	-1.559	2.839	.000	.994
Stud. Residual	-1.568	2.871	.001	1.004
Deleted Residual	- .00363495759 6660	.00669701630 2496	.00000323819 1350	.00233676542 5103
Stud. Deleted Residual	-1.581	2.997	.005	1.016
Mahal. Distance	.000	11.164	.989	1.927
Cook's Distance	.000	.096	.010	.016

Centered Leverage Value	.000	.124	.011	.021
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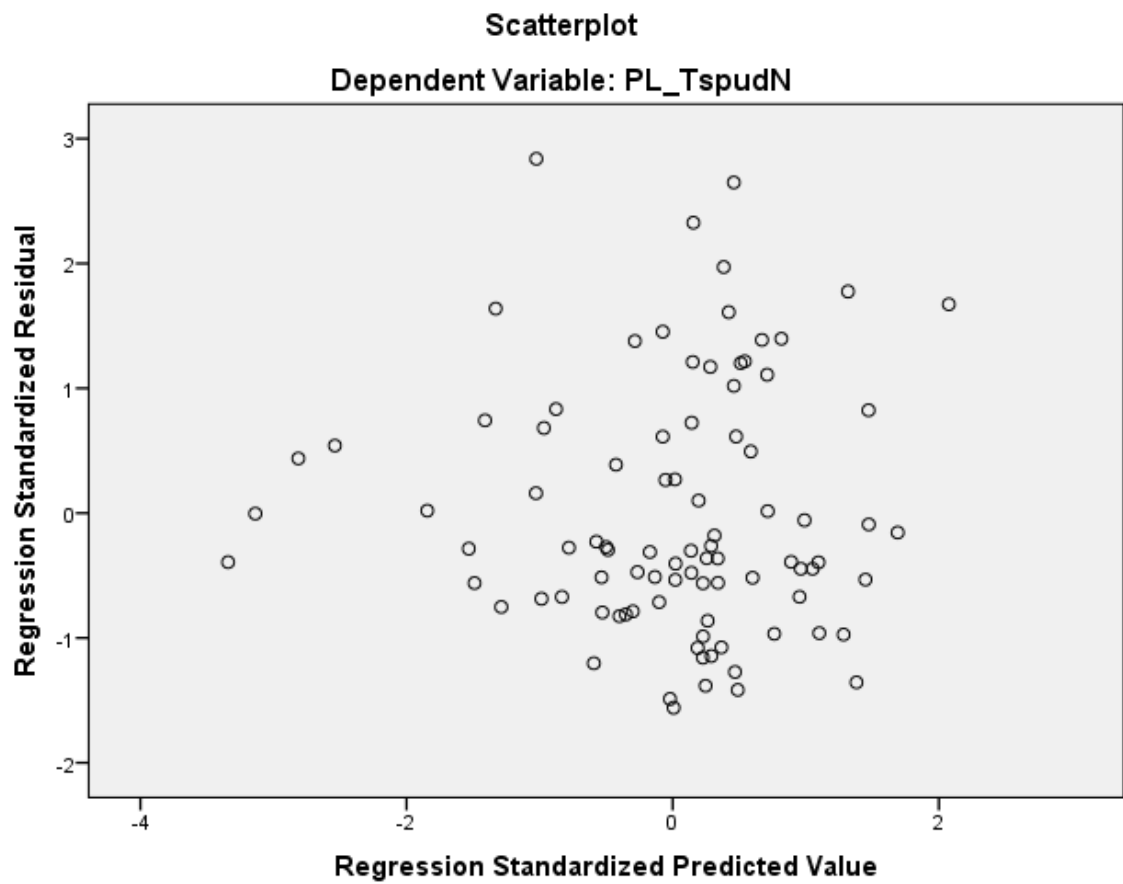
# Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: PL\_TspudN

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S\_ud

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:26:37
Comments		
Input	Active Dataset	DataSet1
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT S_ud
		/METHOD=STEPWISE GD_ud
		Tpaths_ud TSpaths_ud AvgPL_ud
		AvgGL_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	Memory Required	6160 bytes
	Additional Memory	
	Required for Residual	0 bytes
Variables Created or Modified	Plots	
	COO_8	Cook's Distance

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
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1	TSpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	Tpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4		TSpaths_ud	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

5	GD_ud	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: S\_ud

**Model Summary<sup>f</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.356 <sup>a</sup>	.127	.117	.00149605742 5148
2	.424 <sup>b</sup>	.180	.161	.00145781763 9541
3	.758 <sup>c</sup>	.575	.560	.00105550568 7176
4	.755 <sup>d</sup>	.570	.560	.00105542284 1042
5	.857 <sup>e</sup>	.734	.725	.00083492807 3121

a. Predictors: (Constant), TSpaths\_ud

b. Predictors: (Constant), TSpaths\_ud, Tpaths\_ud

c. Predictors: (Constant), TSpaths\_ud, Tpaths\_ud, AvgPL\_ud

d. Predictors: (Constant), Tpaths\_ud, AvgPL\_ud

e. Predictors: (Constant), Tpaths\_ud, AvgPL\_ud, GD\_ud

f. Dependent Variable: S\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	12.893	.001 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	9.654	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	39.234	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.000	90			
4	Regression	.000	2	.000	58.367	.000 <sup>e</sup>
	Residual	.000	88	.000		
	Total	.000	90			
5	Regression	.000	3	.000	80.049	.000 <sup>f</sup>
	Residual	.000	87	.000		
	Total	.000	90			

- a. Dependent Variable: S\_ud
- b. Predictors: (Constant), TSpaths\_ud
- c. Predictors: (Constant), TSpaths\_ud, Tpaths\_ud
- d. Predictors: (Constant), TSpaths\_ud, Tpaths\_ud, AvgPL\_ud
- e. Predictors: (Constant), Tpaths\_ud, AvgPL\_ud
- f. Predictors: (Constant), Tpaths\_ud, AvgPL\_ud, GD\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.020		7.805	.000
	TSpaths_ud	-.849	-.356	-3.591	.001
2	(Constant)	.023		8.321	.000
	TSpaths_ud	-.787	-.330	-3.394	.001
	Tpaths_ud	-.287	-.233	-2.394	.019
3	(Constant)	.016		7.704	.000
	TSpaths_ud	-.180	-.075	-.993	.323
	Tpaths_ud	-3.017	-2.446	-9.555	.000
	AvgPL_ud	2.717	2.287	8.993	.000
4	(Constant)	.014		15.088	.000

	Tpaths_ud	-3.138	.291	-2.544	-10.782	.000
	AvgPL_ud	2.828	.280	2.382	10.093	.000
5	(Constant)	.017	.001		20.430	.000
	Tpaths_ud	-3.731	.244	-3.024	-15.286	.000
	AvgPL_ud	13.135	1.425	11.060	9.218	.000
	GD_ud	-9.908	1.353	-8.231	-7.322	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_ud	1.000	1.000
2	(Constant)		
	TSpaths_ud	.987	1.013
	Tpaths_ud	.987	1.013
3	(Constant)		
	TSpaths_ud	.850	1.177
	Tpaths_ud	.075	13.412
	AvgPL_ud	.076	13.244
4	(Constant)		
	Tpaths_ud	.088	11.400
	AvgPL_ud	.088	11.400
5	(Constant)		



Tpaths_ud	.078	12.806
AvgPL_ud	.002	470.893
GD_ud	.002	413.350

a. Dependent Variable: S\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	-.057 <sup>b</sup>	-.574	.568	-.061	1.000	1.000
	Tpaths_ud	-.233 <sup>b</sup>	-2.394	.019	-.247	.987	1.013
	AvgPL_ud	-.049 <sup>b</sup>	-.497	.620	-.053	1.000	1.000
	AvgGL_ud	.198 <sup>b</sup>	1.794	.076	.188	.787	1.270
2	GD_ud	1.873 <sup>c</sup>	7.207	.000	.611	.087	11.439
	AvgPL_ud	2.287 <sup>c</sup>	8.993	.000	.694	.076	13.244
	AvgGL_ud	.249 <sup>c</sup>	2.307	.023	.240	.765	1.307
3	GD_ud	-8.172 <sup>d</sup>	-7.201	.000	-.613	.002	417.737
	AvgGL_ud	.098 <sup>d</sup>	1.201	.233	.128	.729	1.371
4	GD_ud	-8.231 <sup>e</sup>	-7.322	.000	-.617	.002	413.350
	AvgGL_ud	.040 <sup>e</sup>	.555	.581	.059	.960	1.042
	TSpaths_ud	-.075 <sup>e</sup>	-.993	.323	-.106	.850	1.177
5	AvgGL_ud	.024 <sup>f</sup>	.416	.679	.045	.958	1.043

TSpaths_ud	-.031 <sup>f</sup>	-.506	.614	-.054	.841	1.189
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**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	1.000
	Tpaths_ud	.987
	AvgPL_ud	1.000
	AvgGL_ud	.787
2	GD_ud	.086
	AvgPL_ud	.075
	AvgGL_ud	.765
3	GD_ud	.002
	AvgGL_ud	.072
4	GD_ud	.002
	AvgGL_ud	.087
	TSpaths_ud	.075
5	AvgGL_ud	.002
	TSpaths_ud	.002

a. Dependent Variable: S\_ud

b. Predictors in the Model: (Constant), TSpaths\_ud

c. Predictors in the Model: (Constant), TSpaths\_ud, Tpaths\_ud

d. Predictors in the Model: (Constant), TSpats\_ud, Tpaths\_ud, AvgPL\_ud

e. Predictors in the Model: (Constant), Tpaths\_ud, AvgPL\_ud

f. Predictors in the Model: (Constant), Tpaths\_ud, AvgPL\_ud, GD\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpats_ud	Tpaths_ud
1	1	1.998	1.000	.00	.00	
	2	.002	33.175	1.00	1.00	
2	1	2.989	1.000	.00	.00	.00
	2	.009	18.103	.04	.08	.97
	3	.002	41.118	.96	.92	.03
3	1	3.983	1.000	.00	.00	.00
	2	.014	16.668	.04	.07	.01
	3	.002	46.627	.78	.67	.03
	4	.001	88.872	.18	.26	.95
4	1	2.990	1.000	.00		.00
	2	.009	18.081	.98		.02
	3	.001	69.129	.02		.98
5	1	3.989	1.000	.00		.00
	2	.010	19.638	.85		.01
	3	.001	67.633	.02		.83

4	1.625E-5	495.470	.13		.17
---	----------	---------	-----	--	-----

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions	
		AvgPL_ud	GD_ud
1	1		
	2		
2	1		
	2		
	3		
3	1	.00	
	2	.02	
	3	.01	
	4	.97	
4	1	.00	
	2	.03	
	3	.97	
5	1	.00	.00
	2	.00	.00
	3	.00	.01
	4	1.00	.99

a. Dependent Variable: S\_ud

**Residuals Statistics<sup>a</sup>**

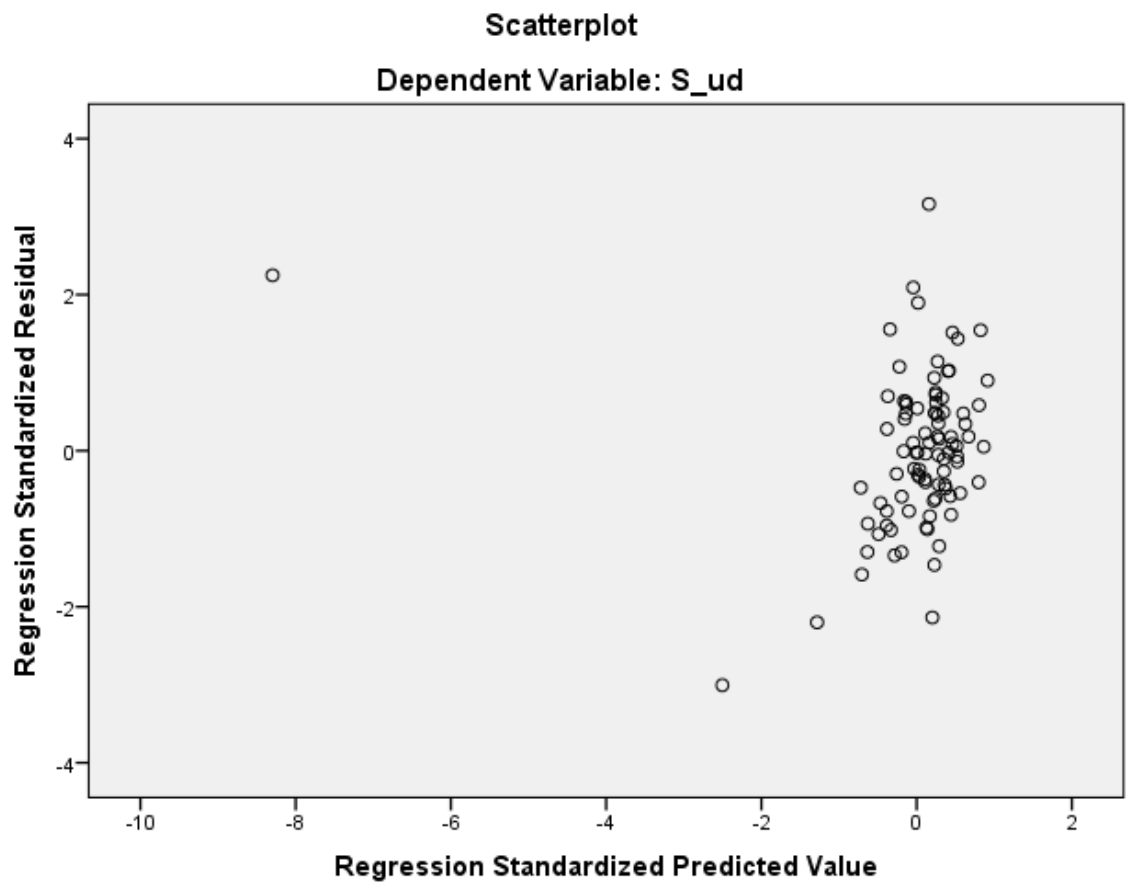
	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00032738765 0032	.01223599724 4716	.01098901098 9011	.00136384930 9842
Std. Predicted Value	-8.297	.914	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	- .01055795885 6225	.01219663675 8745	.01087763002 9987	.00235697883 1991
Residual	- .00250912946 6489	.00263985968 1949	.00000000000 0000	.00082089466 9072
Std. Residual	-3.005	3.162	.000	.983
Stud. Residual	-3.165	5.712	.037	1.146
Deleted Residual	- .00278238393 3663	.01210862025 6186	.00011138095 9024	.00152051044 4583
Stud. Deleted Residual	-3.345	7.183	.053	1.249
Mahal. Distance	.579	75.052	2.967	8.015
Cook's Distance	.000	44.426	.499	4.656
Centered Leverage Value	.006	.834	.033	.089

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: S\_ud

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT R\_ud

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:27:05
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.



Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT R_ud  /METHOD=STEPWISE GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.18
	Memory Required	6192 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_9	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	AvgGL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	TSpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: R\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.360 <sup>a</sup>	.129	.120	.00046250993 8977
2	.431 <sup>b</sup>	.186	.167	.00044979767 9983

a. Predictors: (Constant), AvgGL\_ud

b. Predictors: (Constant), AvgGL\_ud, TSpaths\_ud

c. Dependent Variable: R\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	13.239	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	10.050	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: R\_ud

b. Predictors: (Constant), AvgGL\_ud

c. Predictors: (Constant), AvgGL\_ud, TSpaths\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.010	.000		26.111	.000

	AvgGL_ud	.121	.033	.360	3.639	.000
2	(Constant)	.011	.001		14.528	.000
	AvgGL_ud	.163	.037	.483	4.459	.000
	TSpaths_ud	-.198	.080	-.268	-2.470	.015

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_ud	1.000	1.000
2	(Constant)		
	AvgGL_ud	.787	1.270
	TSpaths_ud	.787	1.270

a. Dependent Variable: R\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.104 <sup>b</sup>	1.033	.304	.110	.964	1.038
	Tpaths_ud	-.025 <sup>b</sup>	-.248	.805	-.026	.960	1.042
	TSpaths_ud	-.268 <sup>b</sup>	-2.470	.015	-.255	.787	1.270

	AvgPL_ud	.105 <sup>b</sup>	1.045	.299	.111	.962	1.039
2	GD_ud	.079 <sup>c</sup>	.801	.425	.086	.953	1.050
	Tpaths_ud	-.020 <sup>c</sup>	-.199	.843	-.021	.960	1.042
	AvgPL_ud	.081 <sup>c</sup>	.815	.417	.087	.952	1.051

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.964
	Tpaths_ud	.960
	TSpaths_ud	.787
	AvgPL_ud	.962
2	GD_ud	.750
	Tpaths_ud	.765
	AvgPL_ud	.749

a. Dependent Variable: R\_ud

b. Predictors in the Model: (Constant), AvgGL\_ud

c. Predictors in the Model: (Constant), AvgGL\_ud, TSpaths\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	AvgGL_ud	TSpaths_ud
1	1	1.991	1.000	.00	.00	
	2	.009	15.188	1.00	1.00	
2	1	2.989	1.000	.00	.00	.00
	2	.010	17.449	.09	.90	.03
	3	.002	42.258	.91	.09	.97

a. Dependent Variable: R\_ud

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01029003132 1347	.01164504047 4832	.01098901098 9011	.00021256392 3950
Std. Predicted Value	-3.288	3.086	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.01052212435 7522	.01173906587 0643	.01099432843 3785	.00020821063 3037
Residual	- .00177951785 7358	.00106526294 2575	.00000000000 0000	.00044477184 9838
Std. Residual	-3.956	2.368	.000	.989
Stud. Residual	-4.048	2.414	-.006	1.014

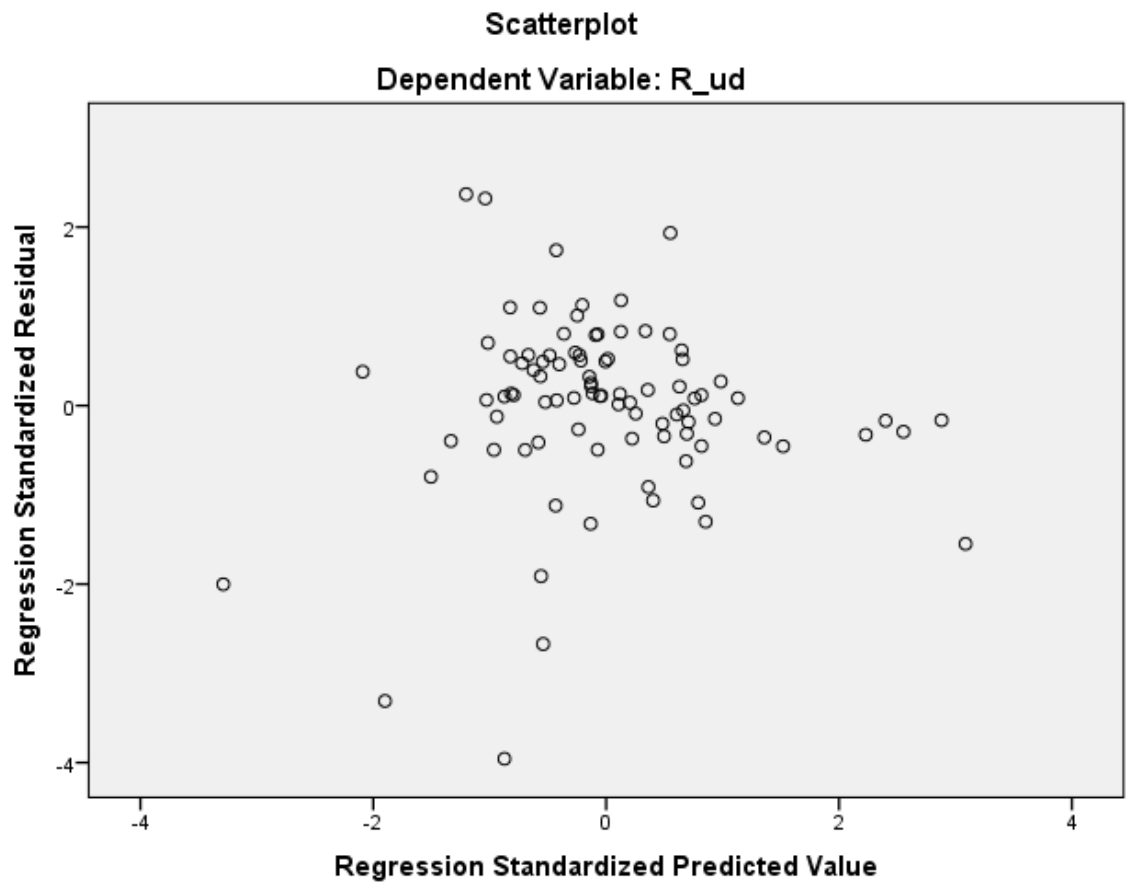
Deleted Residual	- .00186286075 0407	.00110644125 3796	- .00000531744 4774	.00046894295 1111
Stud. Deleted Residual	-4.462	2.484	-.013	1.052
Mahal. Distance	.027	21.379	1.978	3.146
Cook's Distance	.000	.588	.019	.071
Centered Leverage Value	.000	.238	.022	.035

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: R\_ud

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL



/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT SMSP\_ud

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	29-MAY-2015 10:27:23	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT SMSP_ud  /METHOD=STEPWISE GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04
	Memory Required	6240 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_10	Cook's Distance

### Warnings

No variables were entered into the equation.
--

### REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S\_ud

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

### Regression

### Notes

Output Created	29-MAY-2015 10:28:02
----------------	----------------------

Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	90
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT S_ud  /METHOD=STEPWISE GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.14
	Elapsed Time	00:00:00.18

	Memory Required	6272 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_11	Cook's Distance

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	TSpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_ud

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326 <sup>a</sup>	.106	.096	.00118389292 7315

a. Predictors: (Constant), TSpaths\_ud

b. Dependent Variable: S\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	10.447	.002 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			

a. Dependent Variable: S\_ud

b. Predictors: (Constant), TSpaths\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.018	.002		8.539	.000
	TSpaths_ud	-.614	.190	-.326	-3.232	.002

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_ud	1.000	1.000

a. Dependent Variable: S\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	-.114 <sup>b</sup>	-1.128	.262	-.120	1.000	1.000
	Tpaths_ud	-.150 <sup>b</sup>	-1.490	.140	-.158	.994	1.006
	AvgPL_ud	-.100 <sup>b</sup>	-.991	.324	-.106	1.000	1.000
	AvgGL_ud	.191 <sup>b</sup>	1.698	.093	.179	.783	1.278

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	1.000	
	Tpaths_ud	.994	
	AvgPL_ud	1.000	

AvgGL_ud	.783
----------	------

a. Dependent Variable: S\_ud

b. Predictors in the Model: (Constant), TSpats\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpats_ud
1	1	1.998	1.000	.00	.00
	2	.002	33.435	1.00	1.00

a. Dependent Variable: S\_ud

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00962403509 7659	.01174106076 3597	.01109388153 9625	.00040561377 7840
Std. Predicted Value	-3.624	1.596	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00988079607 4867	.01171423401 6836	.01110014907 1127	.00038762965 6319



Residual	- .00455906009 3015	.00319796265 1029	.00000000000 0000	.00117722305 4931
Std. Residual	-3.851	2.701	.000	.994
Stud. Residual	-4.198	2.735	-.002	1.019
Deleted Residual	- .00541879236 6982	.00327926338 6503	- .00000626753 1502	.00123771734 6774
Stud. Deleted Residual	-4.668	2.843	-.008	1.055
Mahal. Distance	.000	13.132	.989	1.852
Cook's Distance	.000	1.662	.027	.175
Centered Leverage Value	.000	.148	.011	.021

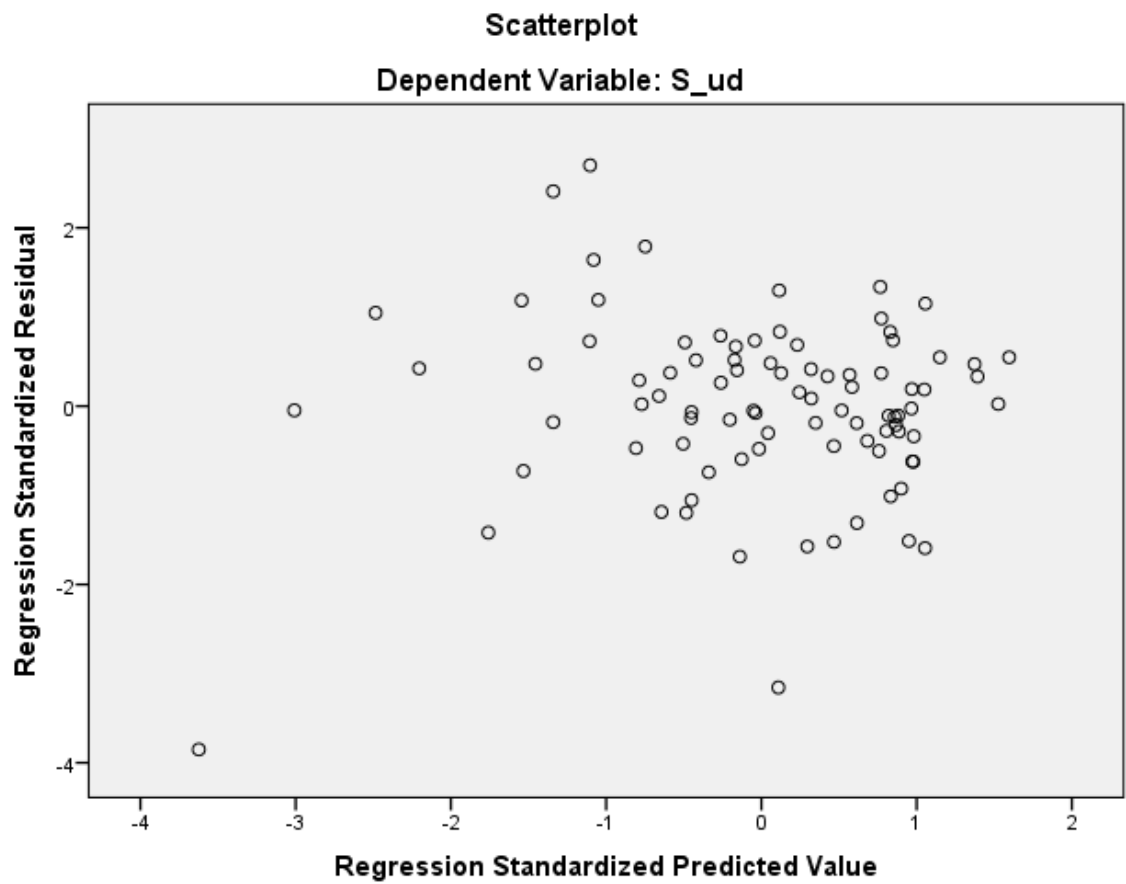
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90

Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: S\_ud

## Charts



## REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT S\_ud

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpaths\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	29-MAY-2015 10:28:33
Comments	
Input	Active Dataset
	DataSet1

	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	89
	Missing Value Handling	<p>Definition of Missing</p> <p>User-defined missing values are treated as missing.</p> <p>Cases Used</p> <p>Statistics are based on cases with no missing values for any variable used.</p>
Syntax		<p>REGRESSION</p> <p>/MISSING LISTWISE</p> <p>/STATISTICS COEFF OUTS R ANOVA COLLIN TOL</p> <p>/CRITERIA=PIN(.05) POUT(.10)</p> <p>/NOORIGIN</p> <p>/DEPENDENT S_ud</p> <p>/METHOD=STEPWISE GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Memory Required	6320 bytes

	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_12	Cook's Distance

### Warnings

No variables were entered into the equation.

GET DATA /TYPE=XLSX

/FILE='C:\Users\Nitin\Desktop\Appendix\Normalized\_Data\Mus\_ud.xlsx'

/SHEET=name 'Sheet1'

/CELLRANGE=full

/READNAMES=on

/ASSUMEDSTRWIDTH=32767.

EXECUTE.

DATASET NAME DataSet1 WINDOW=FRONT.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT GD\_ud

/METHOD=STEPWISE PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

```
/SCATTERPLOT=(*ZRESID ,*ZPRED)
```

```
/SAVE COOK.
```

## Regression

### Notes

Output Created		29-MAY-2015 10:22:47
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT GD_ud
		/METHOD=STEPWISE PL_TpudN
		PL_TspudN S_ud R_ud SMSP_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Memory Required	5872 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or Modified	COO_1	Cook's Distance

[DataSet1]

### Warnings

No variables were entered into the equation.
--

### REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Tpaths\_ud

/METHOD=STEPWISE PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

### Regression

### Notes

Output Created	29-MAY-2015 10:22:56
Comments	



Input	Active Dataset	DataSet1	
	Filter	<none>	
	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File		91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on cases with no missing values for any variable used.	
Syntax		REGRESSION	
		/MISSING LISTWISE	
		/STATISTICS COEFF OUTS R ANOVA COLLIN TOL	
		/CRITERIA=PIN(.05) POUT(.10)	
		/NOORIGIN	
		/DEPENDENT Tpaths_ud	
		/METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud	
Resources		/SCATTERPLOT=(*ZRESID ,*ZPRED)	
		/SAVE COOK.	
	Processor Time		00:00:00.44
	Elapsed Time		00:00:00.50
	Memory Required	5920 bytes	

	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_2	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	S_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: Tpaths\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.269 <sup>a</sup>	.073	.062	.00124965665 8891
2	.337 <sup>b</sup>	.113	.093	.00122886731 2519

a. Predictors: (Constant), S\_ud

b. Predictors: (Constant), S\_ud, R\_ud

c. Dependent Variable: Tpaths\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	6.969	.010 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	5.622	.005 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: Tpaths\_ud

b. Predictors: (Constant), S\_ud

c. Predictors: (Constant), S\_ud, R\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.013	.001		14.574	.000
	S_ud	-.218	.083	-.269	-2.640	.010
2	(Constant)	.008	.003		2.636	.010
	S_ud	-.308	.093	-.380	-3.319	.001
	R_ud	.602	.299	.230	2.009	.048

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	S_ud	1.000	1.000
2	(Constant)		
	S_ud	.770	1.299
	R_ud	.770	1.299

a. Dependent Variable: Tpaths\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	-.004 <sup>b</sup>	-.035	.972	-.004	.996	1.004
	PL_TspudN	.027 <sup>b</sup>	.264	.792	.028	.982	1.019
	R_ud	.230 <sup>b</sup>	2.009	.048	.209	.770	1.299
	SMSP_ud	.143 <sup>b</sup>	1.330	.187	.140	.896	1.116
2	PL_TpudN	.033 <sup>c</sup>	.321	.749	.034	.965	1.036
	PL_TspudN	.060 <sup>c</sup>	.581	.563	.062	.959	1.043
	SMSP_ud	.073 <sup>c</sup>	.634	.528	.068	.769	1.300

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpudN		
	PL_TspudN		
	R_ud		
	SMSP_ud		
2	PL_TpudN		

PL_TspudN	.742
SMSP_ud	.661

- a. Dependent Variable: Tpaths\_ud
- b. Predictors in the Model: (Constant), S\_ud
- c. Predictors in the Model: (Constant), S\_ud, R\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	S_ud	R_ud
1	1	1.990	1.000	.01	.01	
	2	.010	13.955	.99	.99	
2	1	2.987	1.000	.00	.00	.00
	2	.012	15.751	.04	.86	.01
	3	.001	58.776	.96	.14	.99

- a. Dependent Variable: Tpaths\_ud

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	.00968321226 5372	.01271169632 6733	.01098901098 9011	.00043434976 1640
Std. Predicted Value	-3.006	3.966	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.01005724444 9854	.01213331520 5574	.01099067005 3495	.00039645756 3871
Residual	- .00229559047 1476	.00501029798 7610	.00000000000 0000	.00121513652 0526
Std. Residual	-1.868	4.077	.000	.989
Stud. Residual	-2.148	4.105	-.001	1.007
Deleted Residual	- .00303423567 6751	.00507823470 9799	- .00000165906 4484	.00126353371 5284
Stud. Deleted Residual	-2.194	4.539	.005	1.035
Mahal. Distance	.008	36.854	1.978	4.801
Cook's Distance	.000	.495	.014	.058
Centered Leverage Value	.000	.409	.022	.053

#### Residuals Statistics<sup>a</sup>

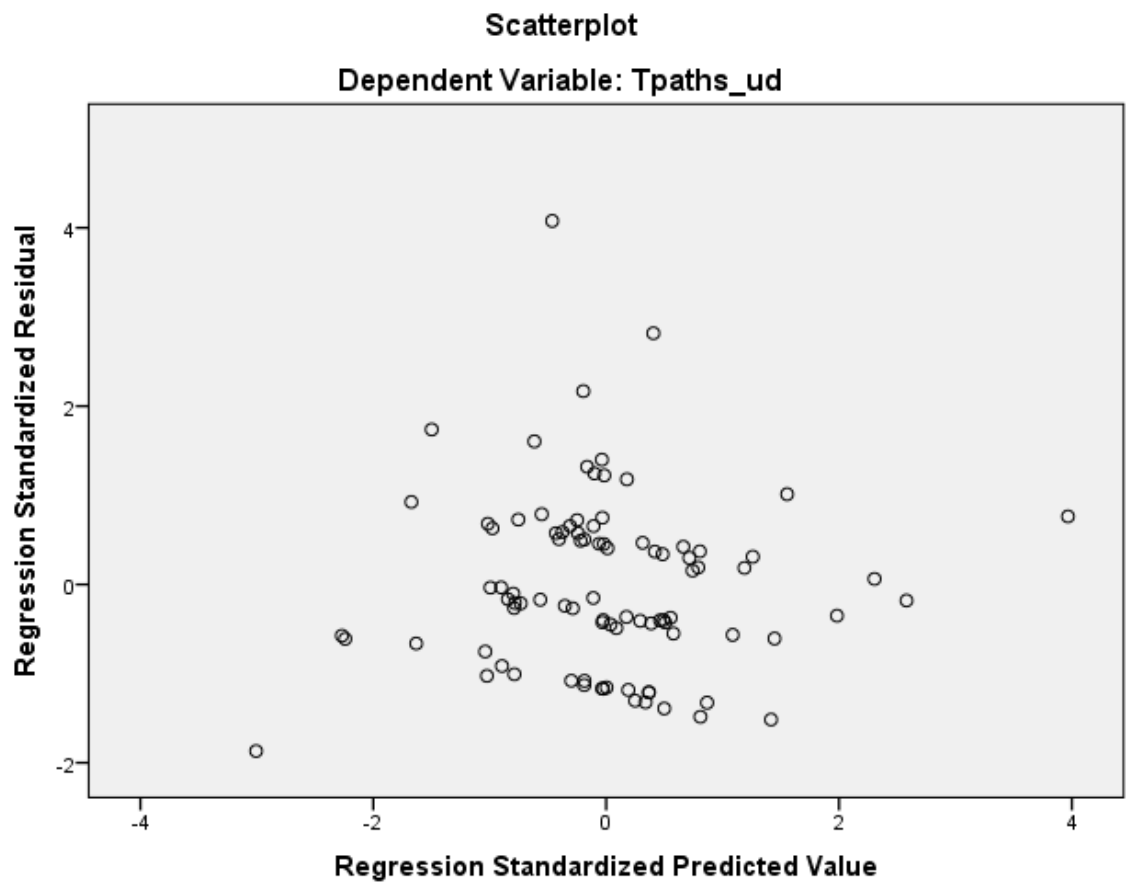
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91

Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: Tpaths\_ud

## Charts





REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT TSpudN

/METHOD=STEPWISE PL\_TspudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		29-MAY-2015 10:23:16
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT TSpaths_ud  /METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.20
	Elapsed Time		00:00:00.20
	Memory Required	5952 bytes	
	Additional Memory Required for Residual Plots	0 bytes	
Variables Created or Modified	COO_3	Cook's Distance	

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	S_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	SMSP_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	PL_TspudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: TSpats\_ud

#### Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
-------	---	----------	-------------------	----------------------------

1	.356 <sup>a</sup>	.127	.117	.00062664935 5854
2	.467 <sup>b</sup>	.218	.200	.00059640507 3986
3	.528 <sup>c</sup>	.279	.254	.00057576130 5569

a. Predictors: (Constant), S\_ud

b. Predictors: (Constant), S\_ud, SMSP\_ud

c. Predictors: (Constant), S\_ud, SMSP\_ud, PL\_TspudN

d. Dependent Variable: TSpats\_ud

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	12.893	.001 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	12.245	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	11.233	.000 <sup>d</sup>
	Residual	.000	87	.000		

Total	.000	90			
-------	------	----	--	--	--

a. Dependent Variable: TSpaths\_ud

b. Predictors: (Constant), S\_ud

c. Predictors: (Constant), S\_ud, SMSP\_ud

d. Predictors: (Constant), S\_ud, SMSP\_ud, PL\_TspudN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.013	.000		27.407	.000
	S_ud	-.149	.041	-.356	-3.591	.001
2	(Constant)	.013	.000		28.956	.000
	S_ud	-.192	.042	-.458	-4.603	.000
	SMSP_ud	.033	.010	.319	3.202	.002
3	(Constant)	.013	.000		27.858	.000
	S_ud	-.180	.041	-.429	-4.440	.000
	SMSP_ud	.035	.010	.334	3.469	.001
	PL_TspudN	-.069	.025	-.251	-2.725	.008

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	S_ud	1.000	1.000
2	(Constant)		
	S_ud	.896	1.116
	SMSP_ud	.896	1.116
3	(Constant)		
	S_ud	.885	1.129
	SMSP_ud	.893	1.119
	PL_TspudN	.978	1.022

a. Dependent Variable: TSpats\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	.203 <sup>b</sup>	2.079	.041	.216	.996	1.004
	PL_TspudN	-.232 <sup>b</sup>	-2.384	.019	-.246	.982	1.019
	R_ud	.163 <sup>b</sup>	1.456	.149	.153	.770	1.299
	SMSP_ud	.319 <sup>b</sup>	3.202	.002	.323	.896	1.116

2	PL_TpudN	.131 <sup>c</sup>	1.343	.183	.142	.924	1.082
	PL_TspudN	-.251 <sup>c</sup>	-2.725	.008	-.280	.978	1.022
	R_ud	.039 <sup>c</sup>	.337	.737	.036	.661	1.513
3	PL_TpudN	.176 <sup>d</sup>	1.858	.067	.196	.902	1.109
	R_ud	-.019 <sup>d</sup>	-.165	.870	-.018	.637	1.569

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpudN	.996
	PL_TspudN	.982
	R_ud	.770
	SMSP_ud	.896
2	PL_TpudN	.832
	PL_TspudN	.885
	R_ud	.661
3	PL_TpudN	.832
	R_ud	.637

a. Dependent Variable: TSpudN\_ud

b. Predictors in the Model: (Constant), S\_ud

c. Predictors in the Model: (Constant), S\_ud, SMSP\_ud

d. Predictors in the Model: (Constant), S\_ud, SMSP\_ud, PL\_TspudN



**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	S_ud	SMSP_ud
1	1	1.990	1.000	.01	.01	
	2	.010	13.955	.99	.99	
2	1	2.825	1.000	.00	.00	.02
	2	.165	4.139	.02	.01	.93
	3	.010	17.009	.97	.98	.05
3	1	3.773	1.000	.00	.00	.01
	2	.187	4.497	.01	.00	.92
	3	.032	10.921	.05	.15	.02
	4	.009	20.159	.94	.85	.05

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions
		PL_TspudN
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.02
	3	.90
	4	.07

a. Dependent Variable: TSpaths\_ud

# Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01016675494 6113	.01246102154 2549	.01098901098 9011	.00035232128 3066
Std. Predicted Value	-2.334	4.178	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.01014217548 0723	.01273909211 1588	.01098852268 5350	.00036804302 5485
Residual	- .00080860091 8390	.00171668094 1172	.00000000000 0000	.00056608395 5750
Std. Residual	-1.404	2.982	.000	.983
Stud. Residual	-1.502	3.038	.001	1.014
Deleted Residual	- .00095252780 0109	.00179015914 9095	.00000048830 3661	.00060310831 3722

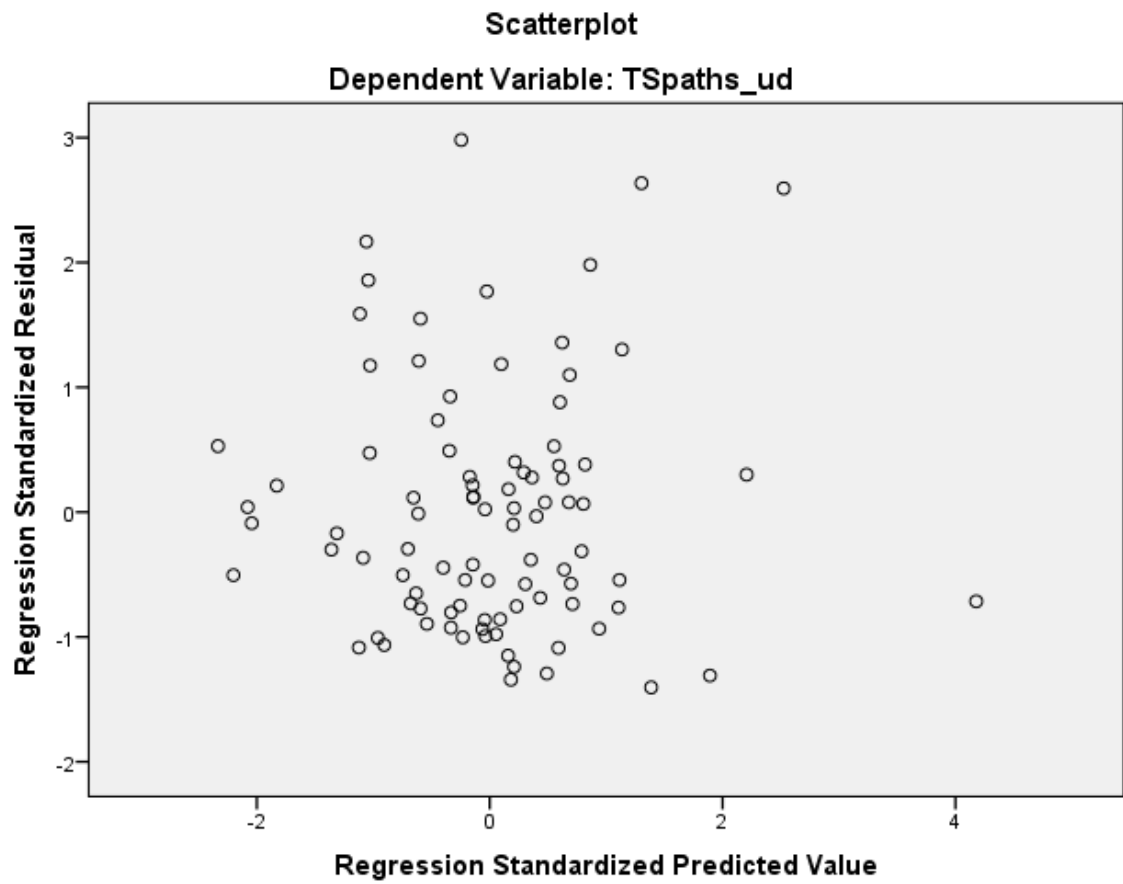
Stud. Deleted Residual	-1.513	3.194	.007	1.030
Mahal. Distance	.029	35.308	2.967	4.644
Cook's Distance	.000	.400	.017	.049
Centered Leverage Value	.000	.392	.033	.052

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: TSpats\_ud

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgPL\_ud

/METHOD=STEPWISE PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	29-MAY-2015 10:23:37	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.
		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgPL_ud  /METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.09
	Memory Required	6000 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_4	Cook's Distance

### Warnings

No variables were entered into the equation.

## REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT AvgGL\_ud

/METHOD=STEPWISE PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	29-MAY-2015 10:23:46
Comments	
Input	Active Dataset DataSet1

Missing Value Handling	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT AvgGL_ud  /METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.23
	Elapsed Time	00:00:00.22
	Memory Required	6032 bytes



	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_5	Cook's Distance

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	PL_TspudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

3	SMSP_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	PL_TpudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgGL\_ud

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.360 <sup>a</sup>	.129	.120	.00137117782 4834
2	.479 <sup>b</sup>	.229	.212	.00129758585 0492
3	.528 <sup>c</sup>	.279	.254	.00126257881 9053
4	.564 <sup>d</sup>	.319	.287	.00123415713 7680

- a. Predictors: (Constant), R\_ud
- b. Predictors: (Constant), R\_ud, PL\_TspudN
- c. Predictors: (Constant), R\_ud, PL\_TspudN, SMSP\_ud
- d. Predictors: (Constant), R\_ud, PL\_TspudN, SMSP\_ud, PL\_TpudN
- e. Dependent Variable: AvgGL\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	13.239	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	13.082	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	11.194	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.000	90			
4	Regression	.000	4	.000	10.050	.000 <sup>e</sup>
	Residual	.000	86	.000		
	Total	.000	90			

- a. Dependent Variable: AvgGL\_ud
- b. Predictors: (Constant), R\_ud
- c. Predictors: (Constant), R\_ud, PL\_TspudN
- d. Predictors: (Constant), R\_ud, PL\_TspudN, SMSP\_ud
- e. Predictors: (Constant), R\_ud, PL\_TspudN, SMSP\_ud, PL\_TpudN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.001	.003		-.228	.820
	R_ud	1.067	.293	.360	3.639	.000
2	(Constant)	.002	.003		.648	.518
	R_ud	1.003	.278	.338	3.607	.001
	PL_TspudN	-.190	.056	-.316	-3.374	.001
3	(Constant)	-.001	.003		-.432	.667
	R_ud	1.362	.308	.459	4.422	.000
	PL_TspudN	-.170	.055	-.283	-3.072	.003
	SMSP_ud	-.058	.024	-.254	-2.439	.017
4	(Constant)	-.005	.004		-1.443	.153
	R_ud	1.598	.319	.539	5.012	.000

PL_TspudN	-.182	.054	-.304	-3.351	.001
SMSP_ud	-.078	.025	-.340	-3.128	.002
PL_TpudN	.155	.069	.220	2.248	.027

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_ud	1.000	1.000
2	(Constant)		
	R_ud	.995	1.005
	PL_TspudN	.995	1.005
3	(Constant)		
	R_ud	.768	1.301
	PL_TspudN	.974	1.027
	SMSP_ud	.765	1.308
4	(Constant)		
	R_ud	.685	1.460
	PL_TspudN	.964	1.037
	SMSP_ud	.669	1.494
	PL_TpudN	.828	1.208

a. Dependent Variable: AvgGL\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	.063 <sup>b</sup>	.623	.535	.066	.966	1.036
	PL_TspudN	-.316 <sup>b</sup>	-3.374	.001	-.338	.995	1.005
	S_ud	-.235 <sup>b</sup>	-2.125	.036	-.221	.770	1.299
	SMSP_ud	-.301 <sup>b</sup>	-2.790	.006	-.285	.781	1.280
2	PL_TpudN	.112 <sup>c</sup>	1.166	.247	.124	.945	1.058
	S_ud	-.172 <sup>c</sup>	-1.601	.113	-.169	.742	1.348
	SMSP_ud	-.254 <sup>c</sup>	-2.439	.017	-.253	.765	1.308
3	PL_TpudN	.220 <sup>d</sup>	2.248	.027	.236	.828	1.208
	S_ud	-.148 <sup>d</sup>	-1.399	.165	-.149	.734	1.362
4	S_ud	-.139 <sup>e</sup>	-1.343	.183	-.144	.733	1.364

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpudN	.966	
	PL_TspudN	.995	
	S_ud	.770	

	SMSP_ud	.781
2	PL_TpudN	.945
	S_ud	.742
	SMSP_ud	.765
3	PL_TpudN	.669
	S_ud	.637
4	S_ud	.584

a. Dependent Variable: AvgGL\_ud

b. Predictors in the Model: (Constant), R\_ud

c. Predictors in the Model: (Constant), R\_ud, PL\_TspudN

d. Predictors in the Model: (Constant), R\_ud, PL\_TspudN, SMSP\_ud

e. Predictors in the Model: (Constant), R\_ud, PL\_TspudN, SMSP\_ud, PL\_TpudN

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_ud	PL_TspudN
1	1	1.999	1.000	.00	.00	
	2	.001	44.853	1.00	1.00	
2	1	2.967	1.000	.00	.00	.01
	2	.032	9.623	.01	.01	.97
	3	.001	55.446	.99	.99	.03

3	1	3.777	1.000	.00	.00	.00
	2	.190	4.457	.00	.00	.02
	3	.032	10.893	.01	.01	.93
	4	.001	70.202	.99	.99	.05
4	1	4.744	1.000	.00	.00	.00
	2	.196	4.916	.00	.00	.01
	3	.035	11.596	.00	.00	.88
	4	.023	14.231	.01	.01	.08
	5	.001	86.220	.99	.98	.02

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions	
		SMSP_ud	PL_TpudN
1	1		
	2		
2	1		
	2		
	3		
3	1	.01	
	2	.78	
	3	.01	
	4	.21	
4	1	.01	.00



2	.70	.00
3	.01	.18
4	.00	.65
5	.28	.17

a. Dependent Variable: AvgGL\_ud

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00816968083 3817	.01280288677 6626	.01098901098 9011	.00082483657 7647
Std. Predicted Value	-3.418	2.199	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00797787215 5607	.01315771974 6232	.01097670426 4361	.00086119835 7032
Residual	- .00208433531 2247	.00356399035 0813	.00000000000 0000	.00120641972 7411
Std. Residual	-1.689	2.888	.000	.978
Stud. Residual	-1.704	2.955	.005	1.004
Deleted Residual	- .00212130160 0710	.00373228453 0997	.00001230672 4650	.00127439157 7285
Stud. Deleted Residual	-1.723	3.100	.010	1.019

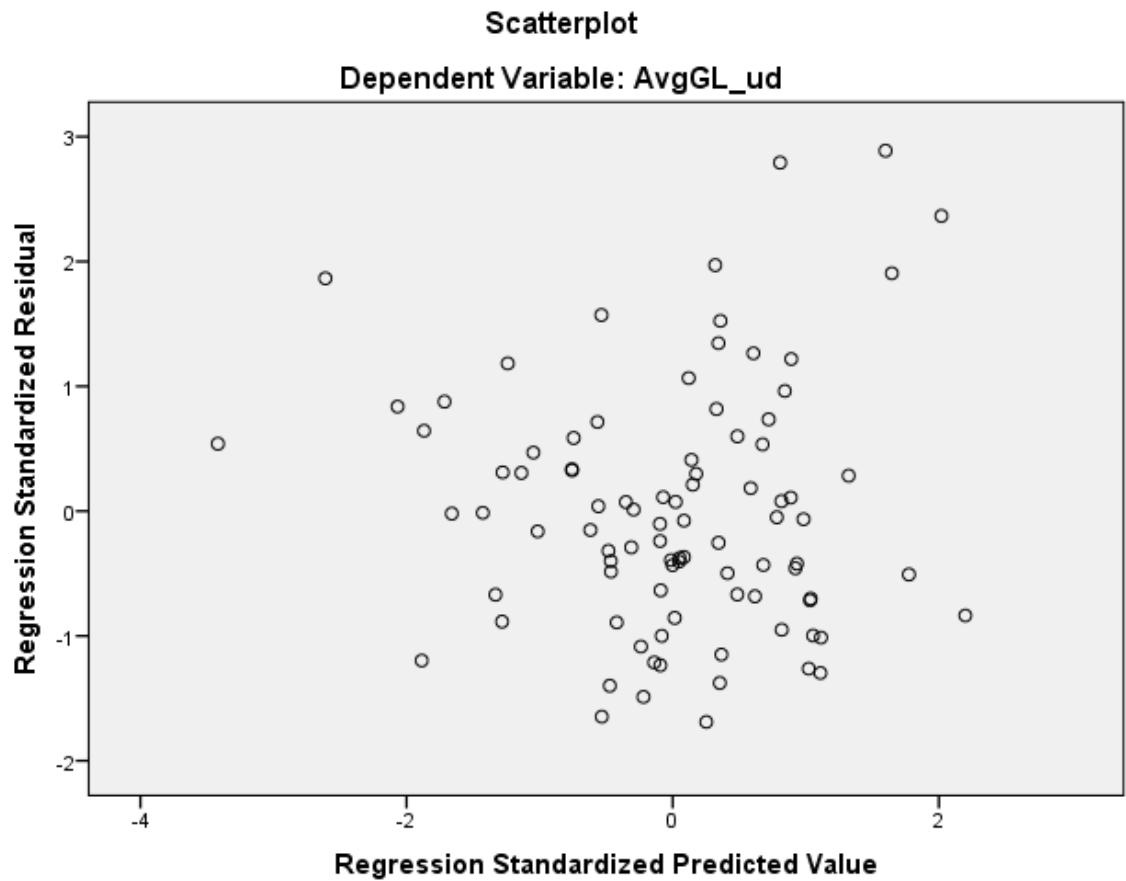
Mahal. Distance	.132	54.842	3.956	7.165
Cook's Distance	.000	.245	.012	.030
Centered Leverage Value	.001	.609	.044	.080

#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: AvgGL\_ud

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ECud

```
/METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud
```

```
/SCATTERPLOT=(*ZRESID,*ZPRED)
```

```
/SAVE COOK.
```

## Regression

### Notes

Output Created		29-MAY-2015 10:34:02
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT ECud  /METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.22
	Elapsed Time		00:00:00.20
	Memory Required	5872 bytes	
	Additional Memory Required for Residual Plots	0 bytes	
Variables Created or Modified	COO_1	Cook's Distance	

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
-------	-------------------	-------------------	--------

1	PL_TspudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	SMSP_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.233 <sup>a</sup>	.054	.044	.00457556244 0285
2	.315 <sup>b</sup>	.099	.079	.00449061880 1916

a. Predictors: (Constant), PL\_TspudN

b. Predictors: (Constant), PL\_TspudN, SMSP\_ud

c. Dependent Variable: ECud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	5.118	.026 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			
2	Regression	.000	2	.000	4.856	.010 <sup>c</sup>
	Residual	.002	88	.000		
	Total	.002	90			

a. Dependent Variable: ECud

b. Predictors: (Constant), PL\_TspudN

c. Predictors: (Constant), PL\_TspudN, SMSP\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.002		2.726	.008

	PL_TspudN	.448	.198	.233	2.262	.026
2	(Constant)	.007	.002		3.240	.002
	PL_TspudN	.488	.195	.254	2.499	.014
	SMSP_ud	-.156	.075	-.213	-2.097	.039

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TspudN	1.000	1.000
2	(Constant)		
	PL_TspudN	.990	1.010
	SMSP_ud	.990	1.010

a. Dependent Variable: ECud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	.003 <sup>b</sup>	.033	.973	.004	.976	1.025
	S_ud	-.010 <sup>b</sup>	-.095	.925	-.010	.982	1.019
	R_ud	-.209 <sup>b</sup>	-2.055	.043	-.214	.995	1.005



	SMSP_ud	-.213 <sup>b</sup>	-2.097	.039	-.218	.990	1.010
2	PL_TpudN	.053 <sup>c</sup>	.506	.614	.054	.929	1.077
	S_ud	.063 <sup>c</sup>	.588	.558	.063	.885	1.129
	R_ud	-.139 <sup>c</sup>	-1.204	.232	-.128	.768	1.301

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpudN	.976
	S_ud	.982
	R_ud	.995
	SMSP_ud	.990
2	PL_TpudN	.929
	S_ud	.885
	R_ud	.765

a. Dependent Variable: ECud

b. Predictors in the Model: (Constant), PL\_TspudN

c. Predictors in the Model: (Constant), PL\_TspudN, SMSP\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	PL_TspudN	SMSP_ud
1	1	1.977	1.000	.01	.01	
	2	.023	9.175	.99	.99	
2	1	2.800	1.000	.01	.01	.03
	2	.176	3.986	.03	.05	.96
	3	.023	10.973	.96	.95	.01

a. Dependent Variable: ECud

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00653458107 2628	.01440575625 7474	.01098901098 9011	.00147517360 7462
Std. Predicted Value	-3.020	2.316	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00523202121 2578	.01459761708 9748	.01097948021 5073	.00151605292 3059
Residual	- .00788428355 0084	.00796080287 5459	.00000000000 0000	.00444044271 5319
Std. Residual	-1.756	1.773	.000	.989
Stud. Residual	-1.797	1.825	.001	1.007

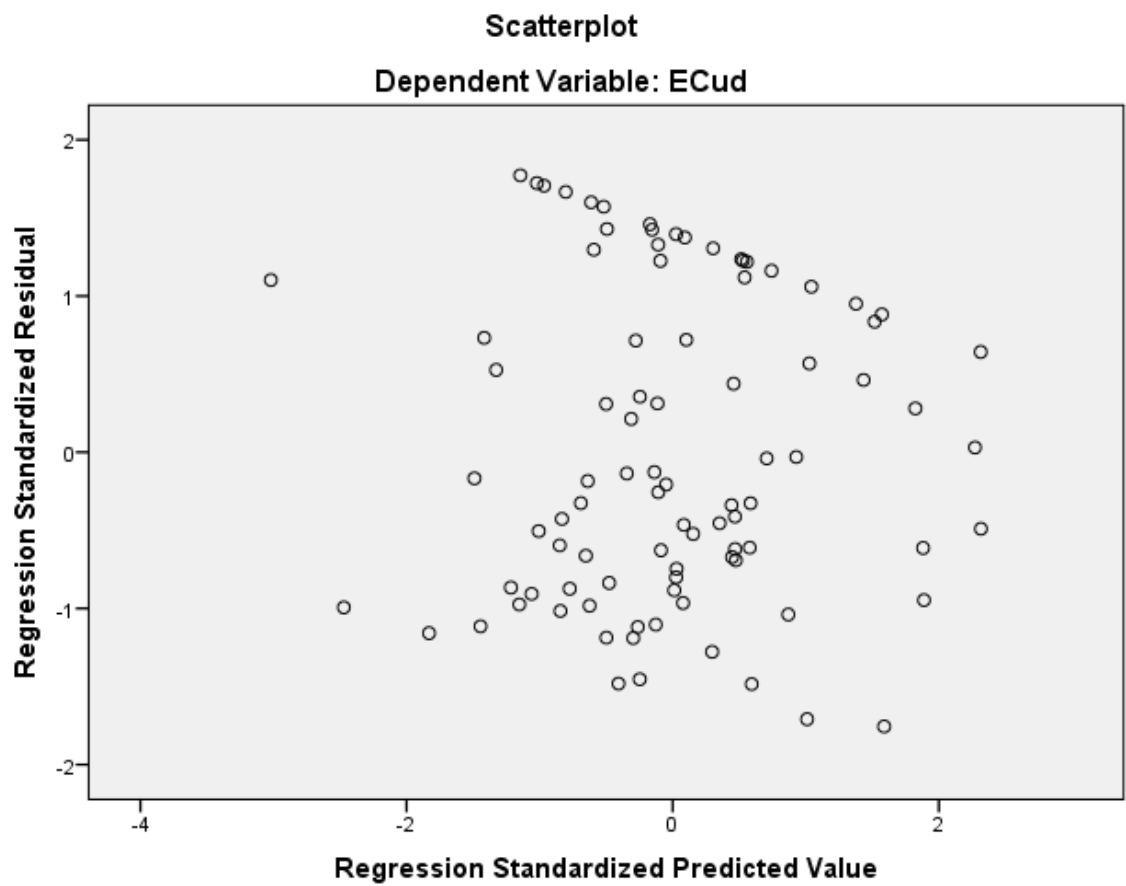
Deleted Residual	- .00825530290 6036	.00868216715 7531	.00000953077 3938	.00460576533 8689
Stud. Deleted Residual	-1.820	1.850	.002	1.011
Mahal. Distance	.027	17.759	1.978	2.689
Cook's Distance	.000	.136	.013	.022
Centered Leverage Value	.000	.197	.022	.030

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91
Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: ECud

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PL_EVCudN

/METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created	29-MAY-2015 10:34:22	
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT PL_EVCudN  /METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Memory Required	5920 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_2	Cook's Distance

### Warnings

No variables were entered into the equation.

### REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TpudN

/METHOD=STEPWISE PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

### Regression

### Notes

Output Created	29-MAY-2015 10:34:30
Comments	

Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT EVCud_TpudN  /METHOD=STEPWISE PL_TpudN PL_TspudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03
	Memory Required	5952 bytes



	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_3	Cook's Distance

### Warnings

No variables were entered into the equation.

### REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT EVCud\_TSpudN

/METHOD=STEPWISE PL\_TpudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

### Regression

### Notes

Output Created		29-MAY-2015 10:34:39
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	91
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION
		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R
		ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
		/NOORIGIN
		/DEPENDENT EVCud_TSpudN
		/METHOD=STEPWISE PL_TpudN
		PL_TspudN S_ud R_ud SMSP_ud
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04
	Memory Required	6000 bytes
	Additional Memory	
	Required for Residual	0 bytes
Variables Created or Modified	COO_4	
		Cook's Distance

Warnings

No variables were entered into the equation.