

# Regression Analysis of All Sports Network

```
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

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Output Created		06-JUN-2015 11:52:58
Comments		
Input	Active Dataset	DataSet4

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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 ECin</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>	
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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	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	PL_TSpinN	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	CC_d	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
5	Edges_d	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
6	PL_TpinN	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECin



### Model Summary<sup>g</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.526 <sup>a</sup>	.277	.269	.00362569016 9034
2	.592 <sup>b</sup>	.351	.336	.00345448707 3017
3	.646 <sup>c</sup>	.417	.397	.00329282914 0114
4	.671 <sup>d</sup>	.450	.425	.00321539535 0484
5	.690 <sup>e</sup>	.476	.445	.00315862519 9974
6	.712 <sup>f</sup>	.507	.471	.00308236983 6407

a. Predictors: (Constant), Reciprocity

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

c. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN

d. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d

e. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d, Edges\_d

f. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d, Edges\_d, PL\_TpinN

g. Dependent Variable: ECin

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	34.049	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	23.774	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			
3	Regression	.001	3	.000	20.728	.000 <sup>d</sup>
	Residual	.001	87	.000		
	Total	.002	90			
4	Regression	.001	4	.000	17.614	.000 <sup>e</sup>
	Residual	.001	86	.000		
	Total	.002	90			
5	Regression	.001	5	.000	15.426	.000 <sup>f</sup>
	Residual	.001	85	.000		
	Total	.002	90			
6	Regression	.001	6	.000	14.375	.000 <sup>g</sup>
	Residual	.001	84	.000		
	Total	.002	90			

a. Dependent Variable: ECin

b. Predictors: (Constant), Reciprocity

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

d. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN

e. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d

f. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d, Edges\_d

g. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d, Edges\_d, PL\_TpinN

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		27.410	.000
	Reciprocity	-.132	.023	-.526	-5.835	.000
2	(Constant)	.021	.003		7.891	.000
	Reciprocity	-.110	.023	-.440	-4.877	.000
	TSpats_d	-.763	.241	-.286	-3.169	.002
3	(Constant)	.024	.003		8.832	.000
	Reciprocity	-.095	.022	-.380	-4.312	.000
	TSpats_d	-.850	.231	-.318	-3.676	.000
	PL_TSpinN	-.256	.082	-.264	-3.139	.002
4	(Constant)	.025	.003		9.266	.000

	Reciprocity	-.119	.024	-.477	-4.973	.000
	TSpaths_d	-.921	.228	-.344	-4.039	.000
	PL_TSpinN	-.247	.080	-.254	-3.089	.003
	CC_d	.012	.005	.212	2.289	.025
5	(Constant)	.027	.003		9.410	.000
	Reciprocity	-.111	.024	-.445	-4.657	.000
	TSpaths_d	-1.237	.273	-.463	-4.535	.000
	PL_TSpinN	-.201	.082	-.207	-2.466	.016
	CC_d	.013	.005	.225	2.472	.015
	Edges_d	.034	.017	.203	2.030	.046
6	(Constant)	.028	.003		9.687	.000
	Reciprocity	-.119	.024	-.475	-5.047	.000
	TSpaths_d	-1.341	.270	-.501	-4.966	.000
	PL_TSpinN	-.408	.120	-.419	-3.391	.001
	CC_d	.013	.005	.230	2.579	.012
	Edges_d	.042	.017	.245	2.468	.016
	PL_TpinN	.299	.130	.293	2.293	.024

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

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

2	(Constant)		
	Reciprocity	.908	1.101
	TSpaths_d	.908	1.101
3	(Constant)		
	Reciprocity	.865	1.156
	TSpaths_d	.895	1.117
	PL_TSpinN	.950	1.053
4	(Constant)		
	Reciprocity	.696	1.437
	TSpaths_d	.879	1.138
	PL_TSpinN	.947	1.056
	CC_d	.746	1.341
5	(Constant)		
	Reciprocity	.677	1.477
	TSpaths_d	.593	1.687
	PL_TSpinN	.876	1.142
	CC_d	.742	1.348
	Edges_d	.616	1.624
6	(Constant)		
	Reciprocity	.664	1.507
	TSpaths_d	.576	1.736
	PL_TSpinN	.384	2.602
	CC_d	.741	1.349

Edges_d	.595	1.682
PL_TpinN	.359	2.782

a. Dependent Variable: ECin

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	.021 <sup>b</sup>	.230	.819	.024	.995	1.005	.995
	Edges_d	.016 <sup>b</sup>	.172	.864	.018	.997	1.003	.997
	Den_d	.219 <sup>b</sup>	2.496	.014	.257	1.000	1.000	1.000
	CC_d	.178 <sup>b</sup>	1.746	.084	.183	.763	1.310	.763
	GD_d	-.200 <sup>b</sup>	-1.894	.061	-.198	.708	1.412	.708
	Tpaths_d	-.233 <sup>b</sup>	-2.322	.023	-.240	.772	1.295	.772
	TSpaths_d	-.286 <sup>b</sup>	-3.169	.002	-.320	.908	1.101	.908
	AvgPL_d	-.142 <sup>b</sup>	-1.287	.202	-.136	.658	1.520	.658
	AvgGL_d	-.309 <sup>b</sup>	-3.001	.004	-.305	.704	1.420	.704
	PL_TpinN	-.100 <sup>b</sup>	-1.060	.292	-.112	.920	1.087	.920
	PL_TSpinN	-.227 <sup>b</sup>	-2.544	.013	-.262	.964	1.038	.964
	S_con	-.199 <sup>b</sup>	-2.236	.028	-.232	.979	1.021	.979
	R_con	-.233 <sup>b</sup>	-2.629	.010	-.270	.968	1.033	.968

	SMSP_d	.045 <sup>b</sup>	.457	.649	.049	.839	1.192	.839
2	Nodes	.254 <sup>c</sup>	2.513	.014	.260	.682	1.467	.622
	Edges_d	.257 <sup>c</sup>	2.516	.014	.260	.668	1.497	.609
	Den_d	.029 <sup>c</sup>	.219	.827	.024	.425	2.351	.386
	CC_d	.227 <sup>c</sup>	2.343	.021	.244	.748	1.337	.731
	GD_d	-.083 <sup>c</sup>	-.741	.461	-.079	.593	1.687	.593
	Tpaths_d	.438 <sup>c</sup>	1.625	.108	.172	.099	10.050	.099
	AvgPL_d	.034 <sup>c</sup>	.279	.781	.030	.493	2.030	.493
	AvgGL_d	-.164 <sup>c</sup>	-1.182	.240	-.126	.380	2.634	.380
	PL_TpinN	-.112 <sup>c</sup>	-1.258	.212	-.134	.918	1.089	.835
	PL_TSpinN	-.264 <sup>c</sup>	-3.139	.002	-.319	.950	1.053	.865
	S_con	-.137 <sup>c</sup>	-1.539	.127	-.163	.913	1.095	.847
	R_con	-.170 <sup>c</sup>	-1.905	.060	-.200	.896	1.117	.840
	SMSP_d	.107 <sup>c</sup>	1.123	.265	.120	.807	1.239	.801
3	Nodes	.182 <sup>d</sup>	1.781	.078	.189	.629	1.589	.620
	Edges_d	.185 <sup>d</sup>	1.801	.075	.191	.619	1.615	.607
	Den_d	.035 <sup>d</sup>	.278	.782	.030	.425	2.351	.385
	CC_d	.212 <sup>d</sup>	2.289	.025	.240	.746	1.341	.696
	GD_d	.059 <sup>d</sup>	.508	.612	.055	.499	2.004	.499
	Tpaths_d	.456 <sup>d</sup>	1.779	.079	.188	.099	10.055	.099
	AvgPL_d	.088 <sup>d</sup>	.745	.458	.080	.483	2.072	.483
	AvgGL_d	-.060 <sup>d</sup>	-.430	.668	-.046	.354	2.827	.354
	PL_TpinN	.233 <sup>d</sup>	1.755	.083	.186	.372	2.686	.372

	S_con	-.110 <sup>d</sup>	-1.287	.202	-.137	.904	1.107	.830
	R_con	-.121 <sup>d</sup>	-1.383	.170	-.148	.861	1.162	.816
	SMSP_d	.114 <sup>d</sup>	1.254	.213	.134	.807	1.240	.770
4	Nodes	.201 <sup>e</sup>	2.023	.046	.214	.625	1.599	.605
	Edges_d	.203 <sup>e</sup>	2.030	.046	.215	.616	1.624	.593
	Den_d	-.035 <sup>e</sup>	-.273	.786	-.030	.401	2.496	.357
	GD_d	-.008 <sup>e</sup>	-.065	.948	-.007	.466	2.145	.466
	Tpaths_d	-.113 <sup>e</sup>	-.238	.812	-.026	.029	34.627	.029
	AvgPL_d	-.127 <sup>e</sup>	-.859	.393	-.093	.293	3.414	.293
	AvgGL_d	-.216 <sup>e</sup>	-1.484	.142	-.159	.298	3.357	.298
	PL_TpinN	.235 <sup>e</sup>	1.815	.073	.193	.372	2.687	.372
	S_con	-.083 <sup>e</sup>	-.974	.333	-.105	.882	1.133	.689
	R_con	-.094 <sup>e</sup>	-1.082	.282	-.117	.842	1.188	.687
	SMSP_d	-.175 <sup>e</sup>	-1.100	.274	-.118	.253	3.948	.234
5	Nodes	-.202 <sup>f</sup>	-.093	.926	-.010	.001	763.939	.001
	Den_d	-.040 <sup>f</sup>	-.317	.752	-.035	.400	2.497	.295
	GD_d	.073 <sup>f</sup>	.597	.552	.065	.420	2.378	.420
	Tpaths_d	.039 <sup>f</sup>	.083	.934	.009	.028	35.541	.028
	AvgPL_d	-.027 <sup>f</sup>	-.174	.862	-.019	.257	3.893	.257
	AvgGL_d	-.063 <sup>f</sup>	-.347	.730	-.038	.190	5.266	.189
	PL_TpinN	.293 <sup>f</sup>	2.293	.024	.243	.359	2.782	.359
	S_con	-.052 <sup>f</sup>	-.611	.543	-.067	.850	1.177	.523
	R_con	-.057 <sup>f</sup>	-.643	.522	-.070	.796	1.256	.505



	SMSP_d	-.164 <sup>f</sup>	-1.051	.296	-.114	.253	3.952	.234
6	Nodes	.976 <sup>g</sup>	.446	.657	.049	.001	807.275	.001
	Den_d	-.044 <sup>g</sup>	-.358	.721	-.039	.400	2.498	.290
	GD_d	.038 <sup>g</sup>	.315	.753	.035	.413	2.419	.353
	Tpaths_d	-.302 <sup>g</sup>	-.629	.531	-.069	.026	39.048	.026
	AvgPL_d	-.118 <sup>g</sup>	-.758	.451	-.083	.242	4.137	.242
	AvgGL_d	-.156 <sup>g</sup>	-.865	.390	-.095	.181	5.517	.181
	S_con	-.038 <sup>g</sup>	-.453	.652	-.050	.845	1.184	.357
	R_con	-.047 <sup>g</sup>	-.549	.584	-.060	.794	1.259	.359
	SMSP_d	-.094 <sup>g</sup>	-.603	.548	-.066	.242	4.137	.228

a. Dependent Variable: ECin

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, PL\_TSpinN

e. Predictors in the Model: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d

f. Predictors in the Model: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d, Edges\_d

g. Predictors in the Model: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d, Edges\_d, PL\_TpinN

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

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

1	1	1.546	1.000	.23	.23	
	2	.454	1.845	.77	.77	
2	1	2.430	1.000	.00	.06	.00
	2	.560	2.083	.00	.87	.00
	3	.009	16.037	.99	.07	.99
3	1	3.305	1.000	.00	.03	.00
	2	.589	2.369	.00	.87	.00
	3	.098	5.813	.02	.00	.04
	4	.009	19.542	.98	.10	.96
4	1	3.386	1.000	.00	.02	.00
	2	1.126	1.734	.00	.08	.00
	3	.382	2.977	.00	.84	.00
	4	.097	5.906	.02	.01	.04
	5	.009	19.955	.98	.05	.96
5	1	3.566	1.000	.00	.02	.00
	2	1.162	1.752	.00	.08	.00
	3	.815	2.092	.00	.00	.00
	4	.373	3.092	.00	.82	.00
	5	.077	6.785	.03	.00	.03
	6	.006	23.692	.97	.07	.97
6	1	4.460	1.000	.00	.01	.00
	2	1.172	1.951	.00	.09	.00
	3	.863	2.273	.00	.00	.00

4	.378	3.437	.00	.82	.00
5	.093	6.917	.04	.01	.03
6	.028	12.664	.00	.02	.00
7	.006	26.682	.96	.06	.97

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

Model	Dimension	Variance Proportions			
		PL_TSpinN	CC_d	Edges_d	PL_TpinN
1	1				
	2				
2	1				
	2				
	3				
3	1	.01			
	2	.01			
	3	.89			
	4	.09			
4	1	.01	.01		
	2	.00	.45		
	3	.00	.52		
	4	.90	.01		
	5	.09	.02		
5	1	.01	.01	.01	

	2	.00	.39	.04	
	3	.01	.08	.50	
	4	.01	.50	.02	
	5	.96	.00	.16	
	6	.01	.02	.26	
6	1	.00	.00	.00	.00
	2	.00	.41	.02	.00
	3	.00	.05	.49	.00
	4	.00	.52	.01	.00
	5	.16	.00	.20	.08
	6	.81	.00	.00	.89
	7	.03	.02	.27	.02

a. Dependent Variable: ECin

# Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00324868038	.01626990921	.01098901098	.00301748684
	2967	7954	9011	3942
Std. Predicted Value	-2.565	1.750	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000

Adjusted Predicted Value	.00273784762 2484	.03346774354 5771	.01115464550 6854	.00384668247 8699
Residual	- .00787804182 6189	.00576274888 5900	.00000000000 0000	.00297785217 1365
Std. Residual	-2.556	1.870	.000	.966
Stud. Residual	-2.603	1.943	-.006	1.000
Deleted Residual	- .01920475810 7662	.00622406741 6042	- .00016563451 7843	.00375104230 3917
Stud. Deleted Residual	-2.699	1.976	-.009	1.010
Mahal. Distance	.215	85.902	5.934	12.170
Cook's Distance	.000	5.354	.068	.561
Centered Leverage Value	.002	.954	.066	.135

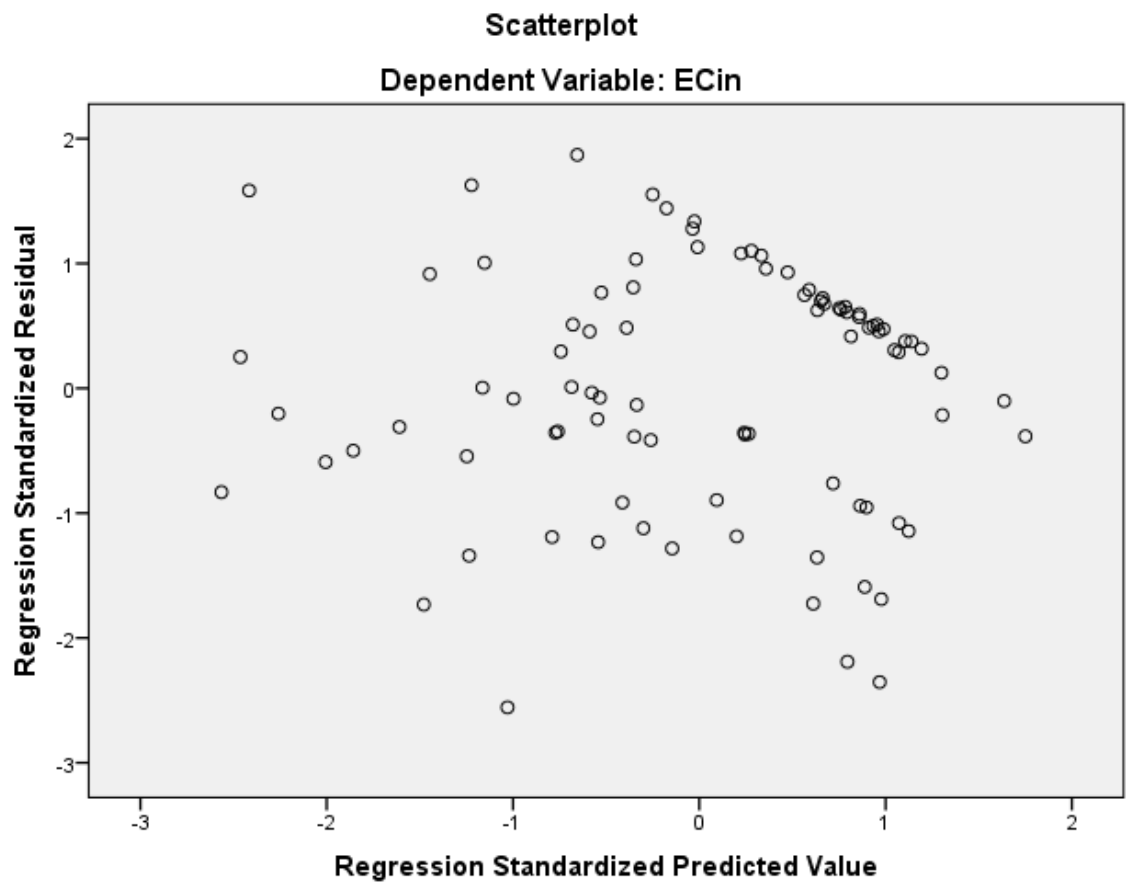
#### Residuals Statistics<sup>a</sup>

	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

Output Created		06-JUN-2015 11:53:34
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_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.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.17
	Memory Required	17232 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	Reciprocity		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).

a. Dependent Variable: PL\_EVCinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.533 <sup>a</sup>	.284	.276	.01105774070 8981
2	.567 <sup>b</sup>	.322	.306	.01082845606 8188

a. Predictors: (Constant), Reciprocity

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

c. Dependent Variable: PL\_EVCinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	35.381	.000 <sup>b</sup>
	Residual	.011	89	.000		
	Total	.015	90			
2	Regression	.005	2	.002	20.852	.000 <sup>c</sup>
	Residual	.010	88	.000		
	Total	.015	90			

a. Dependent Variable: PL\_EVCinN

b. Predictors: (Constant), Reciprocity

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

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

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

		B	Std. Error	Beta		
1	(Constant)	.006	.001		4.695	.000
	Reciprocity	.409	.069	.533	5.948	.000
2	(Constant)	.000	.003		.124	.901
	Reciprocity	.380	.069	.496	5.546	.000
	PL_TSpinN	.585	.267	.196	2.193	.031

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.964	1.038
	PL_TSpinN	.964	1.038

a. Dependent Variable: PL\_EVCinN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	-.045 <sup>b</sup>	-.502	.617	-.053	.995	1.005

	Edges_d	-.035 <sup>b</sup>	-.392	.696	-.042	.997	1.003
	Den_d	-.060 <sup>b</sup>	-.671	.504	-.071	1.000	1.000
	CC_d	-.100 <sup>b</sup>	-.974	.333	-.103	.763	1.310
	GD_d	.137 <sup>b</sup>	1.287	.201	.136	.708	1.412
	Tpaths_d	.038 <sup>b</sup>	.373	.710	.040	.772	1.295
	TSpaths_d	.063 <sup>b</sup>	.669	.505	.071	.908	1.101
	AvgPL_d	-.006 <sup>b</sup>	-.051	.960	-.005	.658	1.520
	AvgGL_d	-.007 <sup>b</sup>	-.065	.949	-.007	.704	1.420
	PL_TpinN	.103 <sup>b</sup>	1.102	.274	.117	.920	1.087
	PL_TSpinN	.196 <sup>b</sup>	2.193	.031	.228	.964	1.038
	S_con	.031 <sup>b</sup>	.344	.732	.037	.979	1.021
	R_con	.040 <sup>b</sup>	.440	.661	.047	.968	1.033
	SMSP_d	-.024 <sup>b</sup>	-.242	.809	-.026	.839	1.192
2	Nodes	.013 <sup>c</sup>	.137	.891	.015	.908	1.101
	Edges_d	.022 <sup>c</sup>	.241	.810	.026	.913	1.095
	Den_d	-.081 <sup>c</sup>	-.912	.364	-.097	.990	1.010
	CC_d	-.085 <sup>c</sup>	-.845	.400	-.090	.760	1.317
	GD_d	.072 <sup>c</sup>	.655	.514	.070	.639	1.565
	Tpaths_d	.062 <sup>c</sup>	.612	.542	.065	.764	1.309
	TSpaths_d	.089 <sup>c</sup>	.954	.343	.102	.895	1.117
	AvgPL_d	-.020 <sup>c</sup>	-.187	.852	-.020	.655	1.526
	AvgGL_d	-.032 <sup>c</sup>	-.306	.760	-.033	.696	1.437

PL_TpinN	-.127 <sup>c</sup>	-.885	.379	-.094	.374	2.671
S_con	.018 <sup>c</sup>	.201	.841	.022	.974	1.026
R_con	.010 <sup>c</sup>	.109	.913	.012	.944	1.059
SMSP_d	-.024 <sup>c</sup>	-.246	.806	-.026	.839	1.192

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.995
	Edges_d	.997
	Den_d	1.000
	CC_d	.763
	GD_d	.708
	Tpaths_d	.772
	TSpaths_d	.908
	AvgPL_d	.658
	AvgGL_d	.704
	PL_TpinN	.920
	PL_TSpinN	.964
	S_con	.979
	R_con	.968
	SMSP_d	.839

2	Nodes	.880
	Edges_d	.883
	Den_d	.954
	CC_d	.733
	GD_d	.639
	Tpaths_d	.736
	TSpaths_d	.865
	AvgPL_d	.648
	AvgGL_d	.696
	PL_TpinN	.374
	S_con	.948
	R_con	.940
	SMSP_d	.813

a. Dependent Variable: PL\_EVCinN

b. Predictors in the Model: (Constant), Reciprocity

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Reciprocity	PL_TSpinN

1	1	1.546	1.000	.23	.23	
	2	.454	1.845	.77	.77	
2	1	2.379	1.000	.02	.07	.02
	2	.552	2.076	.03	.92	.03
	3	.069	5.852	.95	.01	.95

a. Dependent Variable: PL\_EVCinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00038536582 7242	.03702677413 8212	.01098901098 9011	.00737112251 9447
Std. Predicted Value	-1.439	3.532	.000	1.000
Standard Error of Predicted Value	.001	.005	.002	.001
Adjusted Predicted Value	.00041973474 4355	.03997803106 9040	.01105705176 3360	.00756904967 3638
Residual	- .02174658700 8238	.03249528631 5680	.00000000000 0000	.01070746393 4730
Std. Residual	-2.008	3.001	.000	.989
Stud. Residual	-2.140	3.018	-.003	1.005
Deleted Residual	- .02470046468 0791	.03286261856 5559	- .00006804077 4349	.01107622109 4258



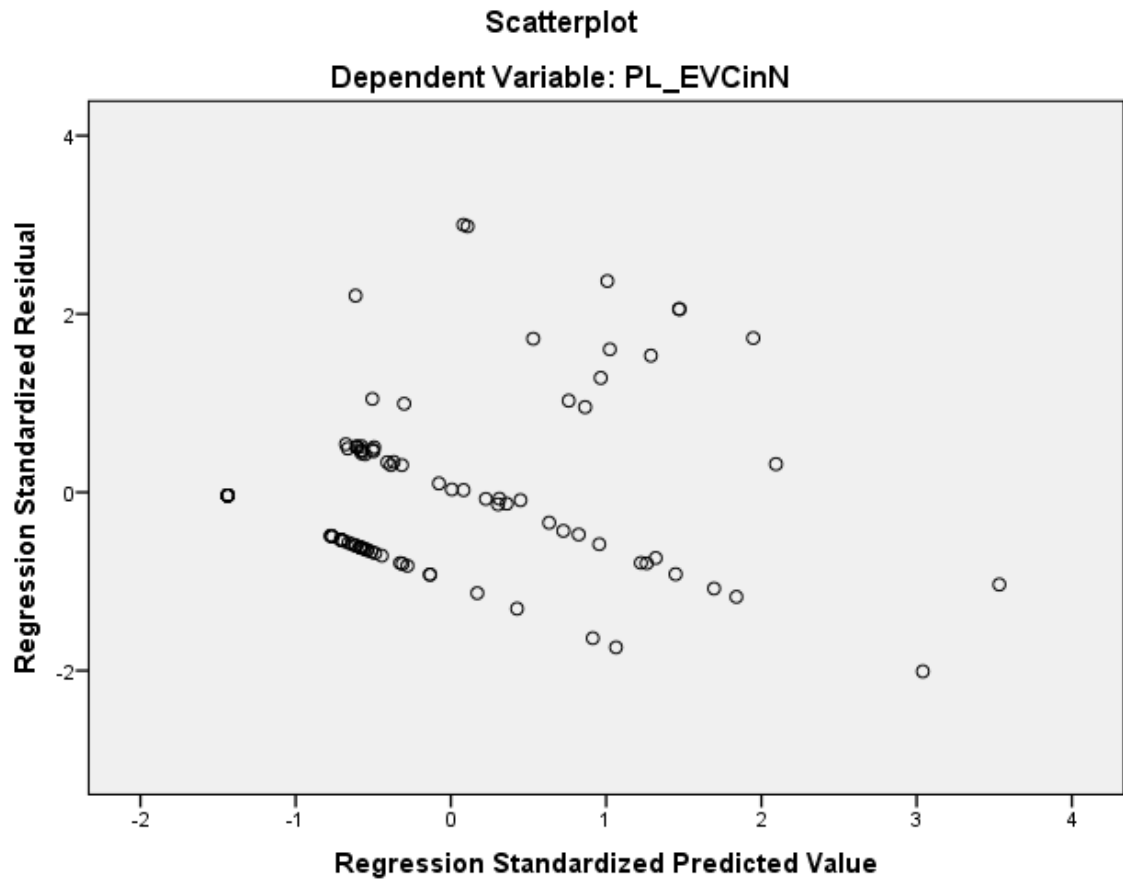
Stud. Deleted Residual	-2.186	3.169	.003	1.023
Mahal. Distance	.015	17.786	1.978	2.754
Cook's Distance	.000	.207	.012	.028
Centered Leverage Value	.000	.198	.022	.031

**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 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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Syntax	Cases Used		Statistics are based on cases with no missing values for any variable used.
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	/STATISTICS COEFF OUTS R ANOVA COLLIN TOL		
	/CRITERIA=PIN(.05) POUT(.10)		
Resources	/NOORIGIN		
	/DEPENDENT EVCin_TpinN		
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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	Den_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCin\_TpinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.392 <sup>a</sup>	.153	.144	.00533286245 1141

a. Predictors: (Constant), Den\_d

b. Dependent Variable: EVCin\_TpinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	16.133	.000 <sup>b</sup>
	Residual	.003	89	.000		
	Total	.003	90			

a. Dependent Variable: EVCin\_TpinN

b. Predictors: (Constant), Den\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.005	.002		2.810	.006
	Den_d	.574	.143	.392	4.017	.000

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

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

a. Dependent Variable: EVCin\_TpinN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	-.116 <sup>b</sup>	-1.071	.287	-.113	.815	1.227
	Edges_d	-.111 <sup>b</sup>	-1.026	.308	-.109	.809	1.236
	Reciprocity	-.045 <sup>b</sup>	-.461	.646	-.049	1.000	1.000
	CC_d	.119 <sup>b</sup>	1.220	.226	.129	.998	1.002
	GD_d	.115 <sup>b</sup>	1.163	.248	.123	.967	1.034
	Tpaths_d	.090 <sup>b</sup>	.761	.449	.081	.685	1.460
	TSpaths_d	.026 <sup>b</sup>	.183	.855	.020	.483	2.069
	AvgPL_d	.123 <sup>b</sup>	1.246	.216	.132	.968	1.033
	AvgGL_d	.061 <sup>b</sup>	.601	.550	.064	.930	1.075
	PL_TpinN	.140 <sup>b</sup>	1.445	.152	.152	.998	1.002
	PL_TSpinN	.099 <sup>b</sup>	1.014	.313	.107	.990	1.010
	S_con	.032 <sup>b</sup>	.323	.748	.034	.968	1.033
	R_con	.038 <sup>b</sup>	.379	.706	.040	.964	1.037
	SMSP_d	.157 <sup>b</sup>	1.624	.108	.171	.997	1.003

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.815
	Edges_d	.809
	Reciprocity	1.000
	CC_d	.998
	GD_d	.967
	Tpaths_d	.685
	TSpaths_d	.483
	AvgPL_d	.968
	AvgGL_d	.930
	PL_TpinN	.998
	PL_TSpinN	.990
	S_con	.968
	R_con	.964
	SMSP_d	.997

a. Dependent Variable: EVCin\_TpinN

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

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



Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Den_d
1	1	1.942	1.000	.03	.03
	2	.058	5.790	.97	.97

a. Dependent Variable: EVCin\_TpinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00482721626 7586	.01531428657 4721	.01098901098 9011	.00225785477 8471
Std. Predicted Value	-2.729	1.916	.000	1.000
Standard Error of Predicted Value	.001	.002	.001	.000
Adjusted Predicted Value	.00532653229 3111	.01547755487 2632	.01099548942 6430	.00224786298 8470
Residual	- .01323810312 8970	.00841938797 3845	.00000000000 0000	.00530315267 9857
Std. Residual	-2.482	1.579	.000	.994
Stud. Residual	-2.510	1.603	-.001	1.006
Deleted Residual	- .01353608723 7298	.00867853965 6103	- .00000647843 7419	.00542309190 7055
Stud. Deleted Residual	-2.589	1.617	-.003	1.014

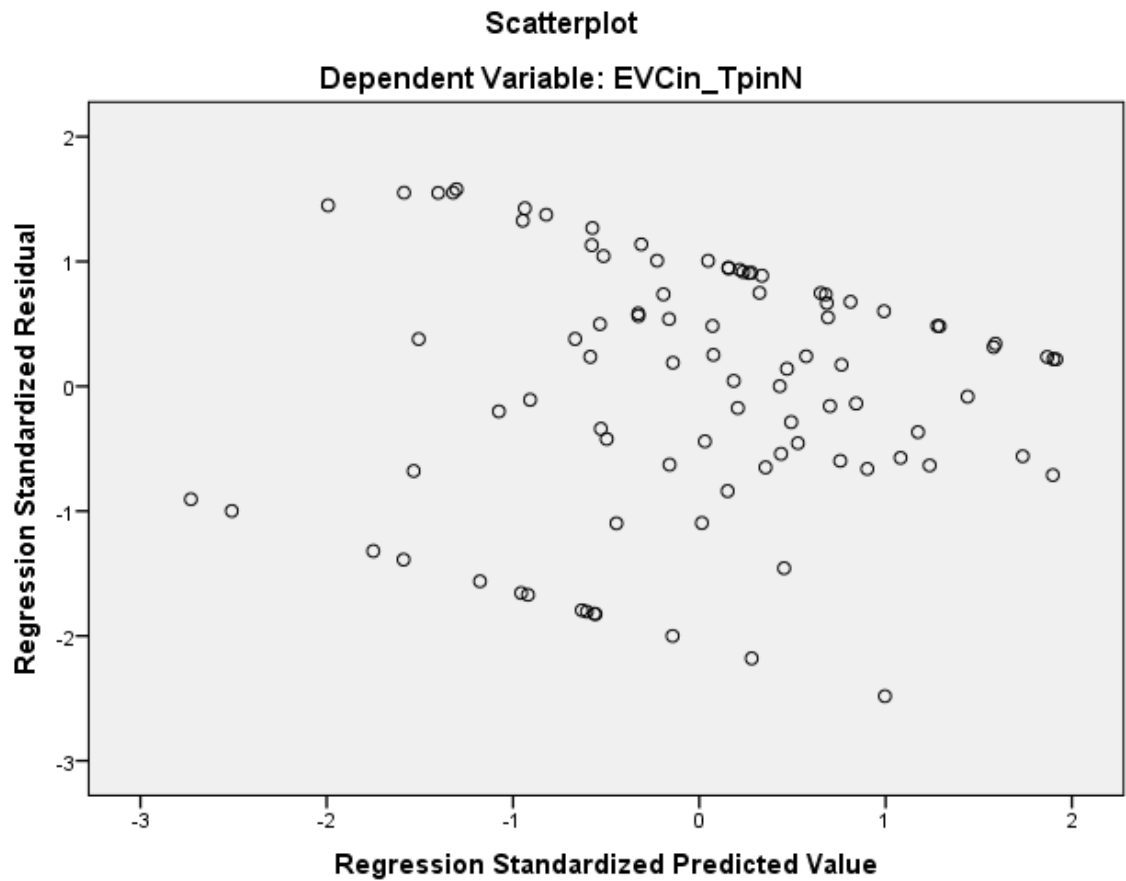
Mahal. Distance	.000	7.448	.989	1.365
Cook's Distance	.000	.071	.011	.016
Centered Leverage Value	.000	.083	.011	.015

#### 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 TSpaths_d
AvgPL_d AvgGL_d PL_TpinN PL_TSpinN S_con R_con 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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Syntax	Cases Used	Statistics are based on cases with no missing values for any variable used.
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		/MISSING LISTWISE
		/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
		/CRITERIA=PIN(.05) POUT(.10)
Resources		/NOORIGIN
		/DEPENDENT EVCin_TSpinN
		/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
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		/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	Den_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCin\_TSpinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.422 <sup>a</sup>	.178	.169	.00543677731 0842

a. Predictors: (Constant), Den\_d

b. Dependent Variable: EVCin\_TSpinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	19.320	.000 <sup>b</sup>
	Residual	.003	89	.000		
	Total	.003	90			

a. Dependent Variable: EVCin\_TSpinN

b. Predictors: (Constant), Den\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.004	.002		2.327	.022
	Den_d	.640	.146	.422	4.395	.000

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

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

a. Dependent Variable: EVCin\_TSpinN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	-.098 <sup>b</sup>	-.922	.359	-.098	.815	1.227
	Edges_d	-.096 <sup>b</sup>	-.902	.369	-.096	.809	1.236
	Reciprocity	-.126 <sup>b</sup>	-1.321	.190	-.139	1.000	1.000
	CC_d	.025 <sup>b</sup>	.254	.800	.027	.998	1.002
	GD_d	.011 <sup>b</sup>	.113	.910	.012	.967	1.034
	Tpaths_d	-.028 <sup>b</sup>	-.241	.810	-.026	.685	1.460
	TSpaths_d	-.071 <sup>b</sup>	-.514	.609	-.055	.483	2.069
	AvgPL_d	-.005 <sup>b</sup>	-.054	.957	-.006	.968	1.033
	AvgGL_d	-.053 <sup>b</sup>	-.528	.599	-.056	.930	1.075
	PL_TpinN	.103 <sup>b</sup>	1.076	.285	.114	.998	1.002
	PL_TSpinN	.068 <sup>b</sup>	.703	.484	.075	.990	1.010
	S_con	.039 <sup>b</sup>	.393	.695	.042	.968	1.033
	R_con	.036 <sup>b</sup>	.364	.717	.039	.964	1.037
	SMSP_d	.037 <sup>b</sup>	.386	.700	.041	.997	1.003

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



Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.815
	Edges_d	.809
	Reciprocity	1.000
	CC_d	.998
	GD_d	.967
	Tpaths_d	.685
	TSpaths_d	.483
	AvgPL_d	.968
	AvgGL_d	.930
	PL_TpinN	.998
	PL_TSpinN	.990
	S_con	.968
	R_con	.964
	SMSP_d	.997

a. Dependent Variable: EVCin\_TSpinN

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Den_d
1	1	1.942	1.000	.03	.03
	2	.058	5.790	.97	.97

a. Dependent Variable: EVCin\_TSpinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00411466648 8022	.01581446081 3999	.01098901098 9011	.00251895305 0438
Std. Predicted Value	-2.729	1.916	.000	1.000
Standard Error of Predicted Value	.001	.002	.001	.000
Adjusted Predicted Value	.00454027764 4992	.01595686934 8884	.01099634746 7128	.00250963834 6351
Residual	- .01349818799 6447	.00922215171 1583	.00000000000 0000	.00540648862 2186
Std. Residual	-2.483	1.696	.000	.994
Stud. Residual	-2.511	1.722	-.001	1.005
Deleted Residual	- .01380202639 8480	.00950601231 3068	- .00000733647 8117	.00552330536 5392
Stud. Deleted Residual	-2.590	1.742	-.003	1.013

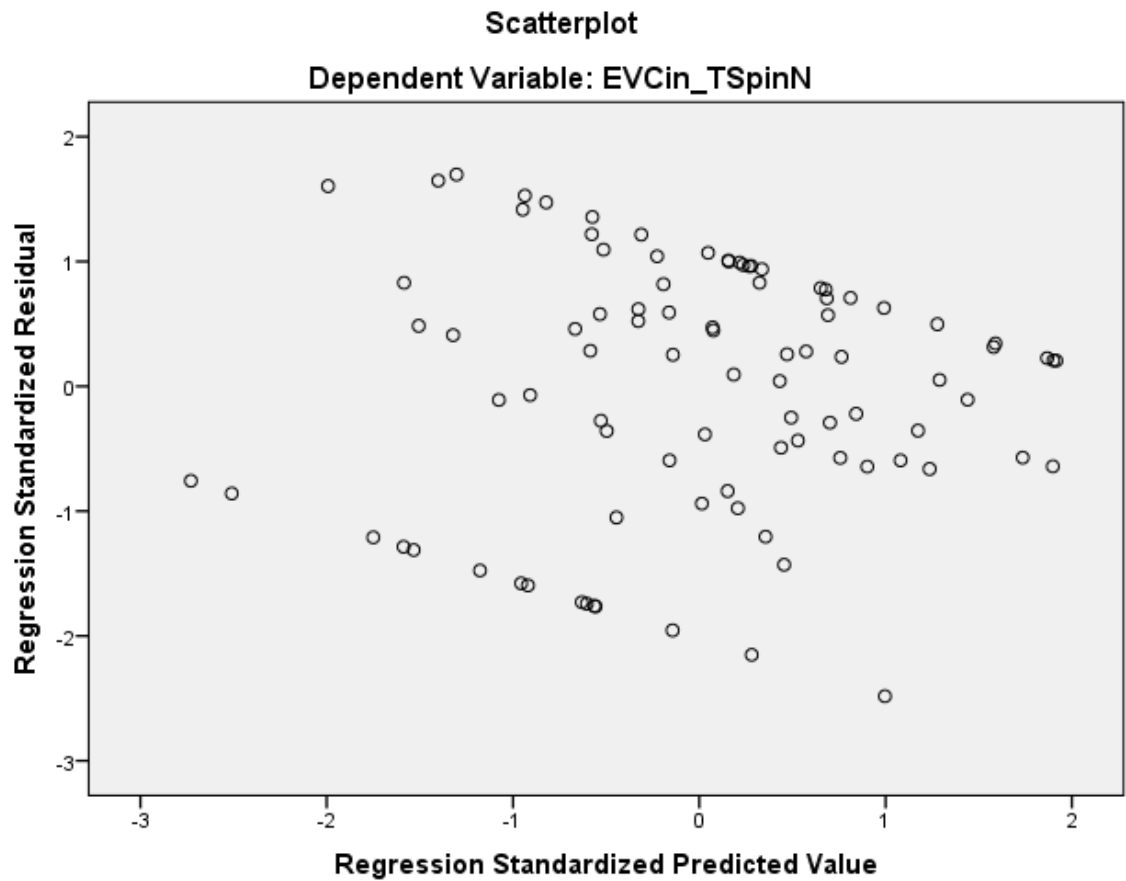
Mahal. Distance	.000	7.448	.989	1.365
Cook's Distance	.000	.079	.011	.015
Centered Leverage Value	.000	.083	.011	.015

#### 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 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

```

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/SCATTERPLOT=(*ZRESID,*ZPRED)

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/SAVE COOK.

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## Regression

### Notes

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	/STATISTICS COEFF OUTS R ANOVA COLLIN TOL		
	/CRITERIA=PIN(.05) POUT(.10)		
Resources	/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		
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	/SAVE COOK.		
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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).
2	TSpaths_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	CC_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

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

a. Dependent Variable: ECin

**Model Summary<sup>f</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523 <sup>a</sup>	.274	.266	.00364093363 6336
2	.617 <sup>b</sup>	.380	.366	.00338254376 9792
3	.655 <sup>c</sup>	.429	.409	.00326519936 2552
4	.683 <sup>d</sup>	.466	.441	.00317675483 1699
5	.703 <sup>e</sup>	.495	.465	.00310868199 9057

a. Predictors: (Constant), Reciprocity

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

c. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN



d. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN,  
CC\_d

e. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN,  
CC\_d, PL\_TpinN

f. Dependent Variable: ECin

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	33.203	.000 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.002	89			
2	Regression	.001	2	.000	26.714	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			
3	Regression	.001	3	.000	21.567	.000 <sup>d</sup>
	Residual	.001	86	.000		
	Total	.002	89			
4	Regression	.001	4	.000	18.553	.000 <sup>e</sup>
	Residual	.001	85	.000		
	Total	.002	89			
5	Regression	.001	5	.000	16.452	.000 <sup>f</sup>
	Residual	.001	84	.000		

Total	.002	89			
-------	------	----	--	--	--

a. Dependent Variable: ECin

b. Predictors: (Constant), Reciprocity

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

d. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN

e. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d

f. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d, PL\_TpinN

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		27.017	.000
	Reciprocity	-.131	.023	-.523	-5.762	.000
2	(Constant)	.023	.003		8.237	.000
	Reciprocity	-.099	.023	-.397	-4.392	.000
	TSpats_d	-1.015	.263	-.350	-3.868	.000
3	(Constant)	.026	.003		8.954	.000
	Reciprocity	-.089	.022	-.357	-4.024	.000
	TSpats_d	-1.020	.253	-.351	-4.024	.000
	PL_TSpinN	-.226	.083	-.225	-2.714	.008

4	(Constant)	.027	.003		9.454	.000
	Reciprocity	-.114	.024	-.456	-4.775	.000
	TSpaths_d	-1.109	.249	-.382	-4.449	.000
	PL_TSpinN	-.213	.081	-.212	-2.625	.010
	CC_d	.012	.005	.222	2.420	.018
5	(Constant)	.027	.003		9.643	.000
	Reciprocity	-.122	.024	-.487	-5.153	.000
	TSpaths_d	-1.185	.246	-.408	-4.807	.000
	PL_TSpinN	-.413	.121	-.411	-3.407	.001
	CC_d	.013	.005	.226	2.509	.014
	PL_TpinN	.286	.131	.270	2.183	.032

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.870	1.149
	TSpaths_d	.870	1.149
3	(Constant)		
	Reciprocity	.845	1.183
	TSpaths_d	.870	1.149

	PL_TSpinN	.968	1.033
4	(Constant)		
	Reciprocity	.688	1.453
	TSpaths_d	.851	1.175
	PL_TSpinN	.964	1.038
	CC_d	.743	1.346
5	(Constant)		
	Reciprocity	.673	1.486
	TSpaths_d	.834	1.199
	PL_TSpinN	.414	2.414
	CC_d	.743	1.346
	PL_TpinN	.393	2.546

a. Dependent Variable: ECin

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.103 <sup>b</sup>	-1.140	.258	-.121	.999	1.001	.999
	Edges_d	-.121 <sup>b</sup>	-1.341	.183	-.142	.999	1.001	.999
	Den_d	.243 <sup>b</sup>	2.776	.007	.285	1.000	1.000	1.000

	CC_d	.178 <sup>b</sup>	1.728	.088	.182	.763	1.311	.763
	GD_d	-.195 <sup>b</sup>	-1.838	.069	-.193	.712	1.405	.712
	Tpaths_d	-.278 <sup>b</sup>	-2.712	.008	-.279	.730	1.370	.730
	TSpaths_d	-.350 <sup>b</sup>	-3.868	.000	-.383	.870	1.149	.870
	AvgPL_d	-.141 <sup>b</sup>	-1.269	.208	-.135	.660	1.515	.660
	AvgGL_d	-.307 <sup>b</sup>	-2.965	.004	-.303	.707	1.415	.707
	PL_TpinN	-.090 <sup>b</sup>	-.952	.344	-.102	.924	1.082	.924
	PL_TSpinN	-.223 <sup>b</sup>	-2.480	.015	-.257	.968	1.033	.968
	S_con	-.199 <sup>b</sup>	-2.220	.029	-.232	.979	1.021	.979
	R_con	-.232 <sup>b</sup>	-2.592	.011	-.268	.969	1.032	.969
	SMSP_d	.045 <sup>b</sup>	.448	.655	.048	.839	1.192	.839
2	Nodes	.185 <sup>c</sup>	1.690	.095	.179	.582	1.719	.506
	Edges_d	.196 <sup>c</sup>	1.707	.091	.181	.526	1.902	.458
	Den_d	.008 <sup>c</sup>	.063	.950	.007	.462	2.166	.402
	CC_d	.238 <sup>c</sup>	2.512	.014	.261	.746	1.340	.712
	GD_d	.002 <sup>c</sup>	.018	.986	.002	.527	1.896	.527
	Tpaths_d	.514 <sup>c</sup>	2.020	.047	.213	.106	9.434	.106
	AvgPL_d	.130 <sup>c</sup>	1.028	.307	.110	.445	2.245	.445
	AvgGL_d	-.011 <sup>c</sup>	-.069	.945	-.007	.277	3.608	.277
	PL_TpinN	-.061 <sup>c</sup>	-.691	.491	-.074	.917	1.090	.824
	PL_TSpinN	-.225 <sup>c</sup>	-2.714	.008	-.281	.968	1.033	.845
	S_con	-.112 <sup>c</sup>	-1.261	.211	-.135	.895	1.118	.795
	R_con	-.137 <sup>c</sup>	-1.525	.131	-.162	.864	1.158	.776

	SMSP_d	.125 <sup>c</sup>	1.334	.186	.142	.802	1.247	.780
3	Nodes	.121 <sup>d</sup>	1.105	.272	.119	.547	1.828	.494
	Edges_d	.137 <sup>d</sup>	1.194	.236	.128	.501	1.995	.448
	Den_d	.019 <sup>d</sup>	.155	.877	.017	.461	2.168	.402
	CC_d	.222 <sup>d</sup>	2.420	.018	.254	.743	1.346	.688
	GD_d	.122 <sup>d</sup>	1.023	.309	.110	.464	2.155	.464
	Tpaths_d	.506 <sup>d</sup>	2.059	.043	.218	.106	9.436	.106
	AvgPL_d	.155 <sup>d</sup>	1.275	.206	.137	.443	2.258	.443
	AvgGL_d	.061 <sup>d</sup>	.389	.698	.042	.269	3.714	.269
	PL_TpinN	.265 <sup>d</sup>	2.078	.041	.220	.393	2.546	.393
	S_con	-.096 <sup>d</sup>	-1.108	.271	-.119	.890	1.124	.794
	R_con	-.102 <sup>d</sup>	-1.153	.252	-.124	.842	1.188	.773
	SMSP_d	.126 <sup>d</sup>	1.396	.166	.150	.802	1.247	.760
4	Nodes	.146 <sup>e</sup>	1.362	.177	.147	.543	1.843	.480
	Edges_d	.155 <sup>e</sup>	1.389	.169	.150	.499	2.003	.438
	Den_d	-.054 <sup>e</sup>	-.450	.654	-.049	.433	2.309	.370
	GD_d	.055 <sup>e</sup>	.460	.647	.050	.435	2.298	.435
	Tpaths_d	.030 <sup>e</sup>	.066	.948	.007	.030	32.809	.030
	AvgPL_d	-.048 <sup>e</sup>	-.309	.758	-.034	.262	3.811	.262
	AvgGL_d	-.116 <sup>e</sup>	-.684	.496	-.074	.221	4.524	.221
	PL_TpinN	.270 <sup>e</sup>	2.183	.032	.232	.393	2.546	.393
	S_con	-.064 <sup>e</sup>	-.753	.454	-.082	.867	1.154	.683
	R_con	-.070 <sup>e</sup>	-.802	.425	-.087	.820	1.219	.683

	SMSP_d	-.161 <sup>e</sup>	-1.025	.308	-.111	.253	3.957	.234
5	Nodes	.186 <sup>f</sup>	1.767	.081	.190	.530	1.888	.383
	Edges_d	.183 <sup>f</sup>	1.671	.098	.180	.493	2.026	.388
	Den_d	-.062 <sup>f</sup>	-.519	.605	-.057	.433	2.311	.365
	GD_d	.020 <sup>f</sup>	.168	.867	.018	.427	2.344	.385
	Tpaths_d	-.287 <sup>f</sup>	-.614	.541	-.067	.028	36.056	.028
	AvgPL_d	-.140 <sup>f</sup>	-.893	.374	-.098	.246	4.067	.246
	AvgGL_d	-.209 <sup>f</sup>	-1.237	.220	-.134	.209	4.773	.209
	S_con	-.053 <sup>f</sup>	-.635	.527	-.070	.863	1.158	.391
	R_con	-.064 <sup>f</sup>	-.750	.455	-.082	.819	1.221	.392
	SMSP_d	-.094 <sup>f</sup>	-.593	.555	-.065	.241	4.145	.228

a. Dependent Variable: ECin

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, PL\_TSpinN

e. Predictors in the Model: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d

f. Predictors in the Model: (Constant), Reciprocity, TSpats\_d, PL\_TSpinN, CC\_d, PL\_TpinN

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

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

1	1	1.549	1.000	.23	.23	
	2	.451	1.853	.77	.77	
2	1	2.438	1.000	.00	.06	.00
	2	.554	2.097	.00	.84	.00
	3	.008	17.622	.99	.11	.99
3	1	3.320	1.000	.00	.03	.00
	2	.586	2.380	.00	.85	.00
	3	.087	6.189	.02	.00	.03
	4	.008	20.872	.97	.12	.96
4	1	3.401	1.000	.00	.02	.00
	2	1.125	1.739	.00	.07	.00
	3	.380	2.990	.00	.84	.00
	4	.086	6.284	.02	.01	.03
	5	.007	21.353	.97	.06	.97
5	1	4.323	1.000	.00	.01	.00
	2	1.152	1.937	.00	.09	.00
	3	.382	3.362	.00	.82	.00
	4	.107	6.349	.03	.01	.04
	5	.028	12.473	.00	.02	.00
	6	.007	24.169	.96	.05	.96

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

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



		PL_TSpinN	CC_d	PL_TpinN
1	1			
	2			
2	1			
	2			
	3			
3	1	.01		
	2	.01		
	3	.95		
	4	.03		
4	1	.01	.01	
	2	.00	.45	
	3	.00	.51	
	4	.95	.01	
	5	.03	.02	
5	1	.00	.00	.00
	2	.00	.44	.00
	3	.00	.52	.00
	4	.15	.01	.08
	5	.81	.00	.90
	6	.04	.02	.01

a. Dependent Variable: ECin

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00358680915 0875	.01644901931 2859	.01095263350 1831	.00298864671 2340
Std. Predicted Value	-2.465	1.839	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	.00261252862 4013	.01679076254 3678	.01091181154 6960	.00303973731 3048
Residual	- .00791548099 3688	.00575748225 6740	.00000000000 0000	.00302009732 1123
Std. Residual	-2.546	1.852	.000	.972
Stud. Residual	-2.594	1.925	.005	1.000
Deleted Residual	- .00821493566 0362	.00622179359 1976	.00004082195 4871	.00321911251 3480
Stud. Deleted Residual	-2.688	1.957	.002	1.010
Mahal. Distance	.221	66.942	4.944	8.678
Cook's Distance	.000	.190	.012	.027
Centered Leverage Value	.002	.752	.056	.098

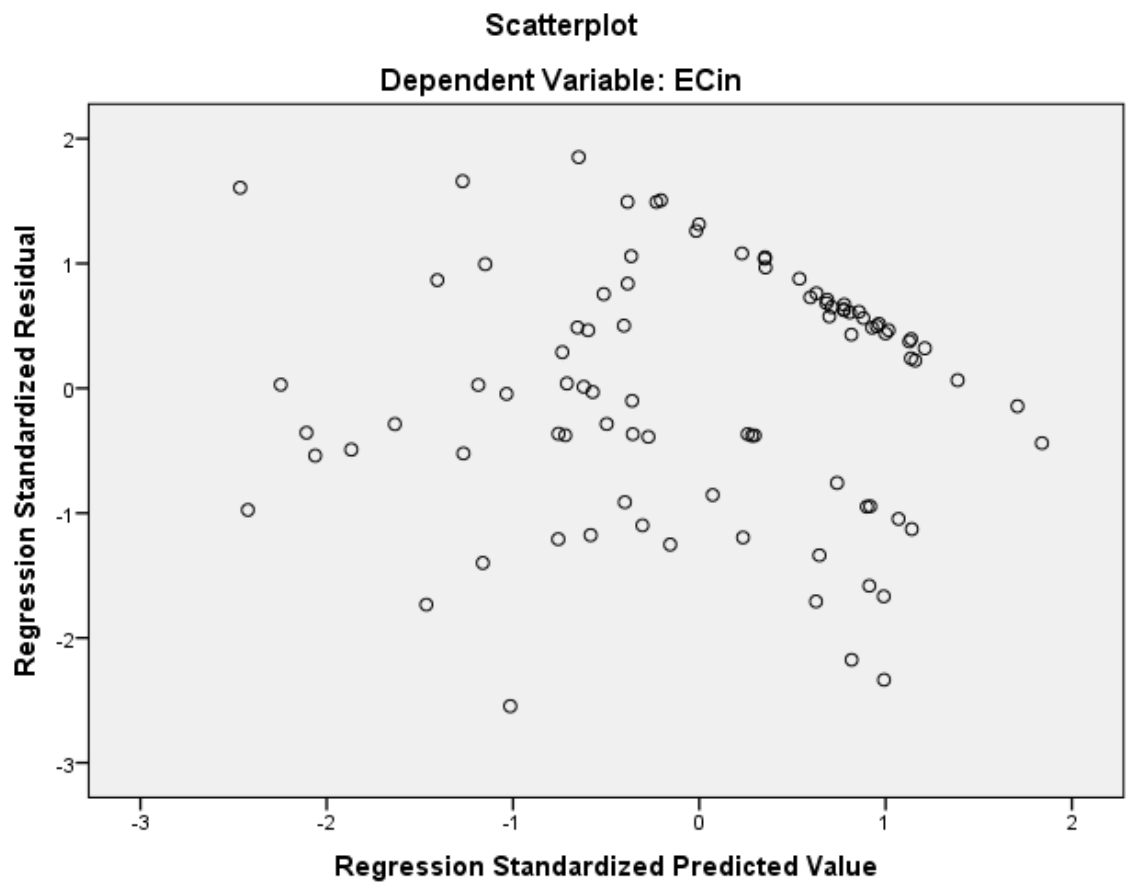
**Residuals Statistics<sup>a</sup>**

	N
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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: ECin

## 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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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 GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
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		,*ZPRED)
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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	AvgGL_d		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>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.504 <sup>a</sup>	.254	.245	.00368313402 8206

a. Predictors: (Constant), AvgGL\_d

b. Dependent Variable: ECin

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	30.241	.000 <sup>b</sup>
	Residual	.001	89	.000		

Total	.002	90			
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a. Dependent Variable: ECin

b. Predictors: (Constant), AvgGL\_d

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.019	.002		12.395	.000
AvgGL_d	-.754	.137	-.504	-5.499	.000

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

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
AvgGL_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	-.074 <sup>b</sup>	-.497	.621	-.053	.376	2.660
	Tpaths_d	-.034 <sup>b</sup>	-.205	.838	-.022	.304	3.292
	TSpaths_d	-.125 <sup>b</sup>	-.963	.338	-.102	.499	2.003
	AvgPL_d	.274 <sup>b</sup>	1.308	.194	.138	.190	5.273

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.376	
	Tpaths_d	.304	
	TSpaths_d	.499	
	AvgPL_d	.190	

a. Dependent Variable: ECin

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	1.969	1.000	.02	.02
	2	.031	7.927	.98	.98

a. Dependent Variable: ECin

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00281654787 2499	.01254435162 9913	.01098901098 9011	.00213496642 8833
Std. Predicted Value	-3.828	.729	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00137805310 0780	.01259554736 3162	.01097149814 9642	.00221178005 9870
Residual	- .00919948983 9375	.00683827186 0033	.00000000000 0000	.00366261501 6027
Std. Residual	-2.498	1.857	.000	.994
Stud. Residual	-2.521	2.043	.002	1.009
Deleted Residual	- .00937533192 3366	.00827676616 6091	.00001751283 9369	.00377039426 5137
Stud. Deleted Residual	-2.602	2.080	.000	1.016
Mahal. Distance	.000	14.653	.989	2.345
Cook's Distance	.000	.439	.015	.050

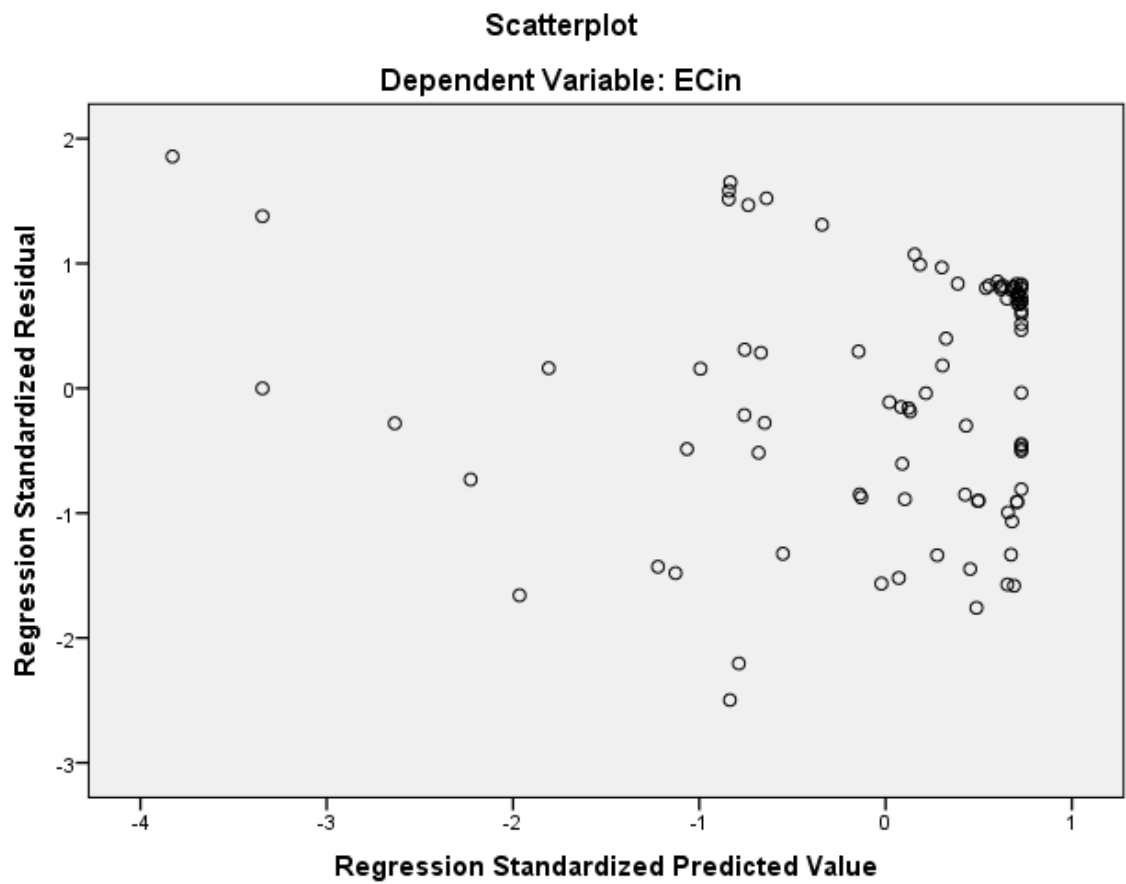
Centered Leverage Value	.000	.163	.011	.026
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# Residuals Statistics<sup>a</sup>

	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

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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 PL_EVCinN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
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	Required for Residual	0 bytes
Variables Created or Modified	Plots	
	COO_2	Cook's Distance

**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).
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a. Dependent Variable: PL\_EVCinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.385 <sup>a</sup>	.148	.139	.01206522467 6956

a. Predictors: (Constant), GD\_d

b. Dependent Variable: PL\_EVCinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	15.476	.000 <sup>b</sup>
	Residual	.013	89	.000		

Total	.015	90			
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a. Dependent Variable: PL\_EVCinN

b. Predictors: (Constant), GD\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.000	.003		.133	.895
	GD_d	.964	.245	.385	3.934	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_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	Tpaths_d	.050 <sup>b</sup>	.376	.708	.040	.556	1.798
	TSpaths_d	.041 <sup>b</sup>	.363	.717	.039	.762	1.312
	AvgPL_d	-.061 <sup>b</sup>	-.329	.743	-.035	.285	3.511
	AvgGL_d	-.050 <sup>b</sup>	-.311	.756	-.033	.376	2.660

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376

a. Dependent Variable: PL\_EVCinN

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	1.905	1.000	.05	.05
	2	.095	4.482	.95	.95

a. Dependent Variable: PL\_EVCinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00471781892 7020	.03065774962 3060	.01098901098 9011	.00500310155 0192
Std. Predicted Value	-1.253	3.931	.000	1.000
Standard Error of Predicted Value	.001	.005	.002	.001
Adjusted Predicted Value	.00356538337 6554	.03494149073 9584	.01102148337 9282	.00518805504 7071
Residual	- .01916140504 1814	.03936010971 6654	.00000000000 0000	.01199800841 7596
Std. Residual	-1.588	3.262	.000	.994
Stud. Residual	-1.757	3.310	-.001	1.007
Deleted Residual	- .02344514615 8338	.04051254689 6935	- .00003247239 0271	.01231240922 3316
Stud. Deleted Residual	-1.778	3.514	.008	1.031
Mahal. Distance	.152	15.455	.989	2.118
Cook's Distance	.000	.345	.013	.042

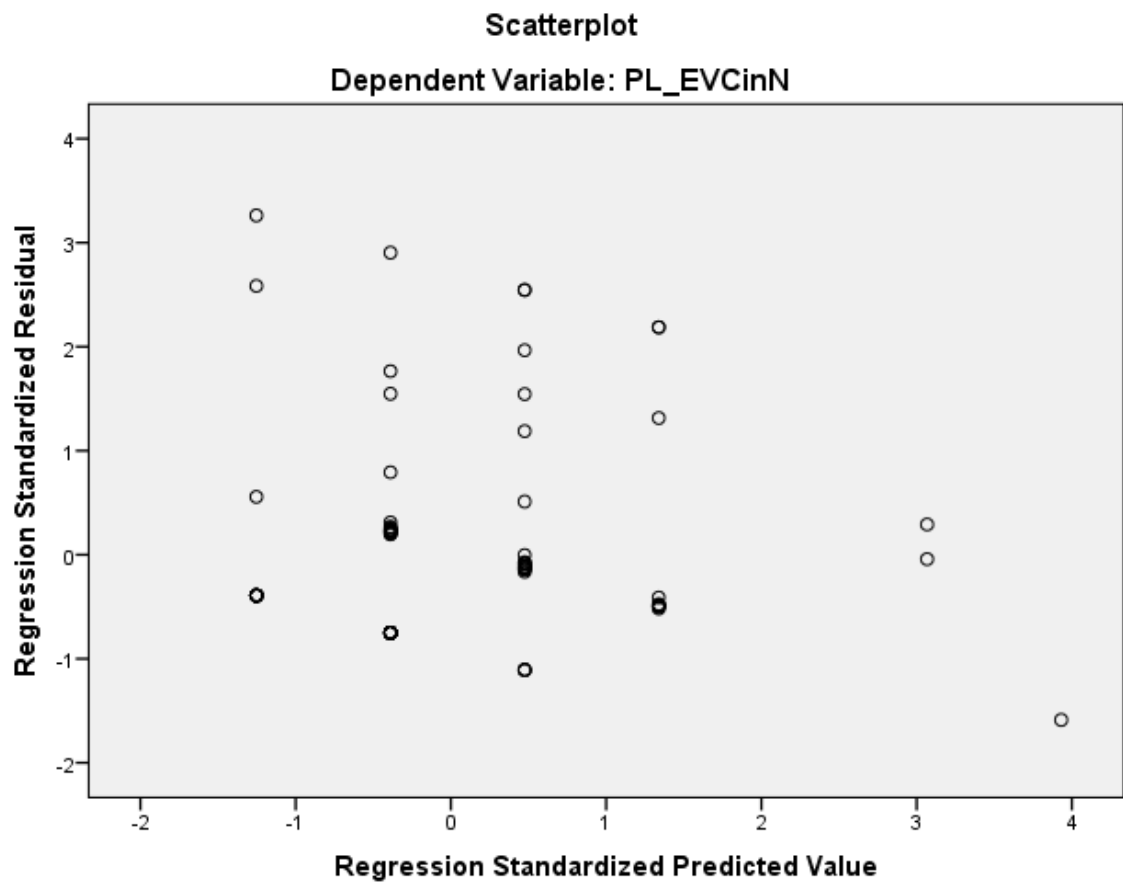
Centered Leverage Value	.002	.172	.011	.024
-------------------------	------	------	------	------

# 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\_EVCinN

## Charts



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 TSpats\_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
		/DEPENDENT EVCin_TpinN
		/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	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
-------	----------------------	----------------------	--------

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: EVCin\_TpinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.269 <sup>a</sup>	.072	.062	.00558226680 8463
2	.363 <sup>b</sup>	.132	.112	.00543149714 3775

a. Predictors: (Constant), TSpaths\_d

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

c. Dependent Variable: EVCin\_TpinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	6.949	.010 <sup>b</sup>
	Residual	.003	89	.000		
	Total	.003	90			
2	Regression	.000	2	.000	6.675	.002 <sup>c</sup>
	Residual	.003	88	.000		
	Total	.003	90			

a. Dependent Variable: EVCin\_TpinN

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)	.022	.004		5.277	.000



	TSpaths_d	-.978	.371	-.269	-2.636	.010
2	(Constant)	.025	.004		5.932	.000
	TSpaths_d	-1.584	.437	-.436	-3.620	.000
	AvgPL_d	.286	.117	.295	2.451	.016

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.681	1.468
	AvgPL_d	.681	1.468

a. Dependent Variable: EVCin\_TpinN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.225 <sup>b</sup>	1.957	.054	.204	.762	1.312
	Tpaths_d	.640 <sup>b</sup>	2.429	.017	.251	.142	7.039
	AvgPL_d	.295 <sup>b</sup>	2.451	.016	.253	.681	1.468

	AvgGL_d	.288 <sup>b</sup>	2.027	.046	.211	.499	2.003
2	GD_d	.012 <sup>c</sup>	.064	.949	.007	.285	3.513
	Tpaths_d	.300 <sup>c</sup>	.444	.658	.048	.022	45.835
	AvgGL_d	-.030 <sup>c</sup>	-.109	.913	-.012	.131	7.615

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.762
	Tpaths_d	.142
	AvgPL_d	.681
	AvgGL_d	.499
2	GD_d	.254
	Tpaths_d	.022
	AvgGL_d	.131

a. Dependent Variable: EVCin\_TpinN

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	1.990	1.000	.01	.01	
	2	.010	14.008	.99	.99	
2	1	2.855	1.000	.00	.00	.02
	2	.138	4.554	.03	.01	.74
	3	.008	19.082	.97	.99	.24

a. Dependent Variable: EVCin\_TpinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00062766869 0868	.01563769765 1982	.01098901098 9011	.00209183094 0637
Std. Predicted Value	-4.953	2.222	.000	1.000
Standard Error of Predicted Value	.001	.003	.001	.000
Adjusted Predicted Value	- .00045636727 0090	.01524724997 5801	.01094234596 5211	.00220032355 2503
Residual	- .01192166097 4622	.01163509301 8413	.00000000000 0000	.00537080812 0044
Std. Residual	-2.195	2.142	.000	.989
Stud. Residual	-2.210	2.406	.004	1.006

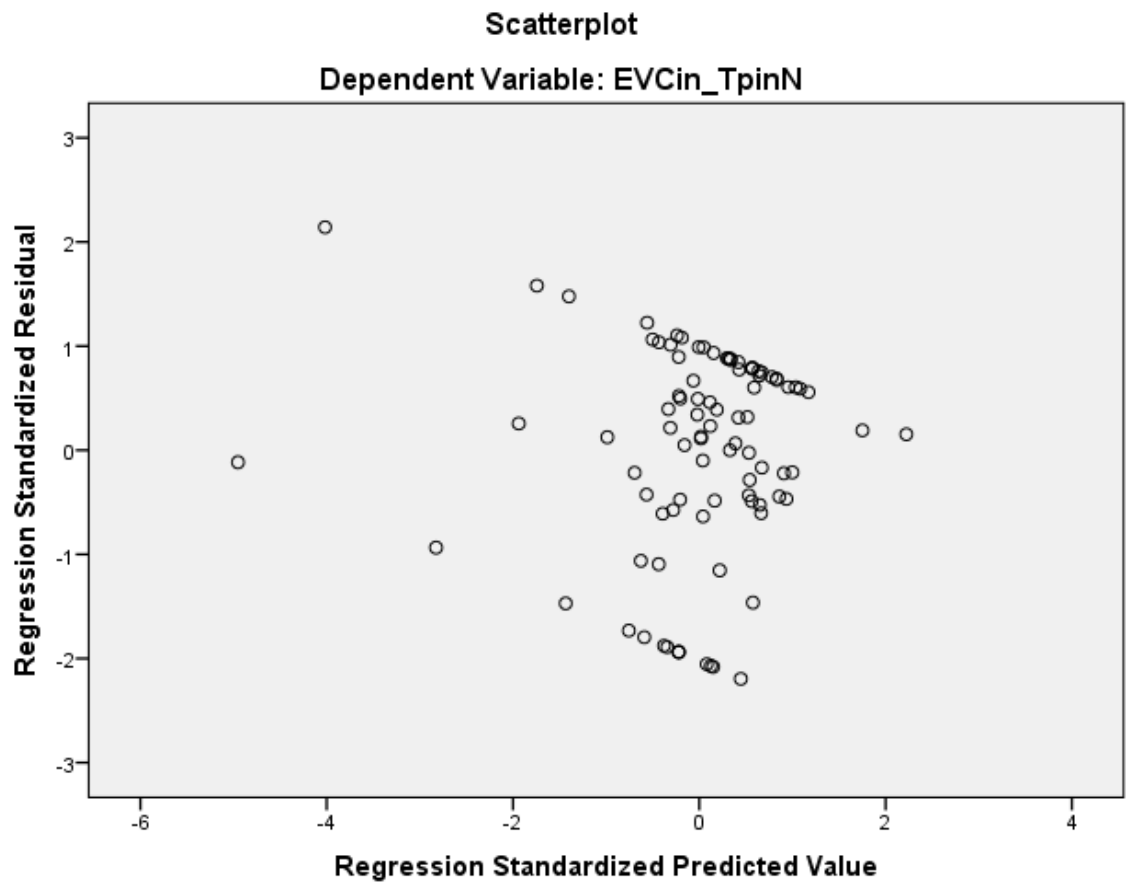
Deleted Residual	- .01208141539 2458	.01467524375 7665	.00004666502 3800	.00556398229 9372
Stud. Deleted Residual	-2.261	2.475	.000	1.016
Mahal. Distance	.003	27.759	1.978	5.067
Cook's Distance	.000	.504	.013	.053
Centered Leverage Value	.000	.308	.022	.056

**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: 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 TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created	06-JUN-2015 11:48:43	
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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 EVCin_TSpinN</p> <p>/METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
Resources	Processor Time	00:00:00.19
	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	TSpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCin\_TSpinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.338 <sup>a</sup>	.114	.104	.00564481815 8182

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: EVCin\_TSpinN

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



Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	11.483	.001 <sup>b</sup>
	Residual	.003	89	.000		
	Total	.003	90			

a. Dependent Variable: EVCin\_TSpinN

b. Predictors: (Constant), TSpats\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.025	.004		5.992	.000
	TSpats_d	-1.271	.375	-.338	-3.389	.001

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

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

a. Dependent Variable: EVCin\_TSpinN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.130 <sup>b</sup>	1.140	.257	.121	.762	1.312
	Tpaths_d	.400 <sup>b</sup>	1.523	.131	.160	.142	7.039
	AvgPL_d	.162 <sup>b</sup>	1.343	.183	.142	.681	1.468
	AvgGL_d	.157 <sup>b</sup>	1.116	.267	.118	.499	2.003

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.762	
	Tpaths_d	.142	
	AvgPL_d	.681	
	AvgGL_d	.499	

a. Dependent Variable: EVCin\_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	1.990	1.000	.01	.01
	2	.010	14.008	.99	.99

a. Dependent Variable: EVCin\_TSpinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00331917847 5067	.01373408921 0629	.01098901098 9011	.00201626282 6855
Std. Predicted Value	-3.804	1.361	.000	1.000
Standard Error of Predicted Value	.001	.002	.001	.000
Adjusted Predicted Value	.00096126325 6613	.01362980250 2692	.01096415388 5624	.00210649886 4423
Residual	- .01197414472 6992	.01136924233 2876	.00000000000 0000	.00561337045 8573
Std. Residual	-2.121	2.014	.000	.994
Stud. Residual	-2.136	2.213	.002	1.008
Deleted Residual	- .01213974878 1919	.01372715737 6707	.00002485710 3387	.00577594836 7822

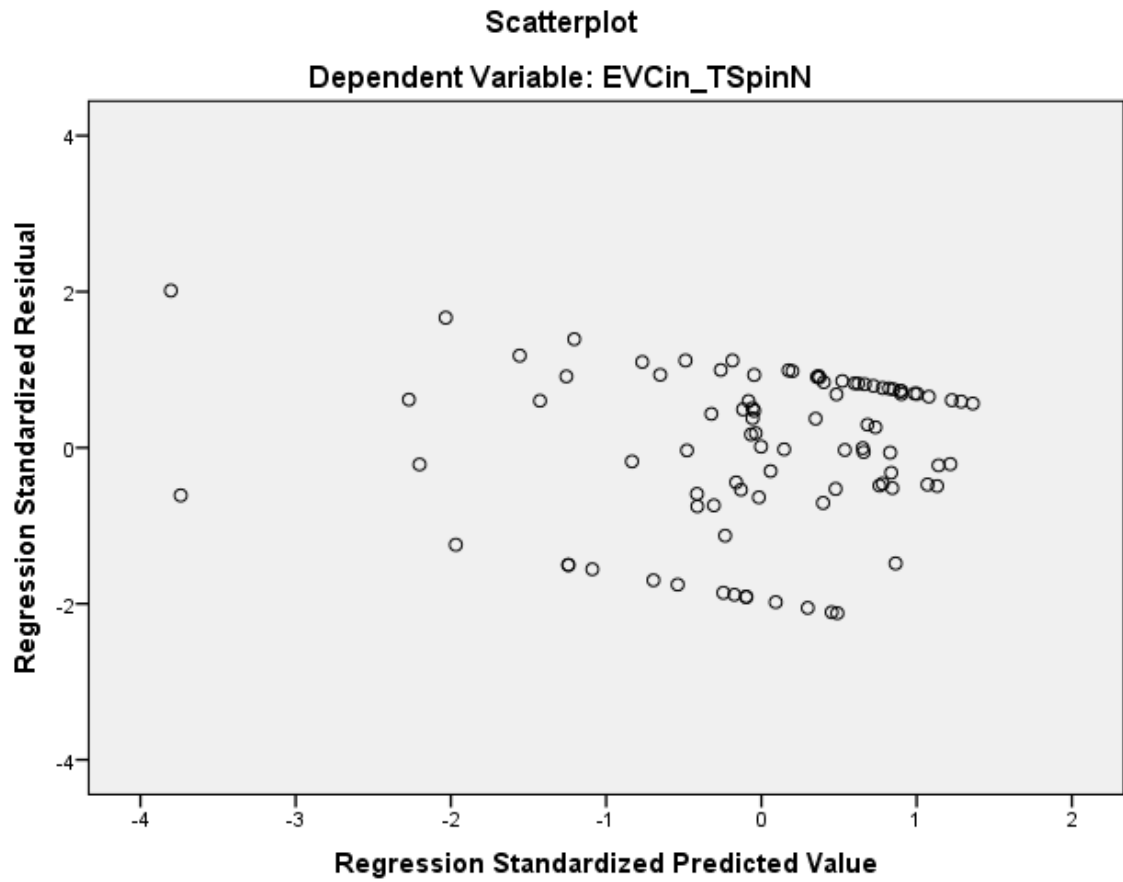
Stud. Deleted Residual	-2.180	2.264	-.001	1.017
Mahal. Distance	.000	14.470	.989	2.230
Cook's Distance	.000	.508	.015	.054
Centered Leverage Value	.000	.161	.011	.025

**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 TSpats\_d AvgPL\_d AvgGL\_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 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		00:00:00.21
	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	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\_TpinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.439 <sup>a</sup>	.192	.183	.00375946156 4505
2	.486 <sup>b</sup>	.236	.218	.00367808639 6551



a. Predictors: (Constant), GD\_d

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

c. Dependent Variable: PL\_TpinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	21.212	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.000	2	.000	13.572	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

a. Dependent Variable: PL\_TpinN

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)	.007	.001		7.684	.000
	GD_d	.352	.076	.439	4.606	.000
2	(Constant)	.012	.002		5.165	.000
	GD_d	.501	.100	.625	4.998	.000
	Tpaths_d	-.575	.258	-.279	-2.232	.028

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.556	1.798
	Tpaths_d	.556	1.798

a. Dependent Variable: PL\_TpinN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.279 <sup>b</sup>	-2.232	.028	-.231	.556	1.798

	TSpaths_d	-.222 <sup>b</sup>	-2.069	.041	-.215	.762	1.312
	AvgPL_d	-.196 <sup>b</sup>	-1.097	.276	-.116	.285	3.511
	AvgGL_d	-.016 <sup>b</sup>	-.103	.918	-.011	.376	2.660
2	TSpaths_d	-.011 <sup>c</sup>	-.040	.968	-.004	.112	8.934
	AvgPL_d	.073 <sup>c</sup>	.327	.745	.035	.176	5.675
	AvgGL_d	.389 <sup>c</sup>	1.920	.058	.202	.205	4.871

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376
2	TSpaths_d	.082
	AvgPL_d	.176
	AvgGL_d	.205

a. Dependent Variable: PL\_TpinN

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 Index	Variance Proportions		
				(Constant)	GD_d	Tpaths_d
1	1	1.905	1.000	.05	.05	
	2	.095	4.482	.95	.95	
2	1	2.887	1.000	.00	.01	.00
	2	.102	5.325	.09	.63	.01
	3	.011	16.181	.91	.36	.99

a. Dependent Variable: PL\_TpinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00461063347 7569	.01886866055 4290	.01098901098 9011	.00201990431 7780
Std. Predicted Value	-3.158	3.901	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00637474935 5018	.01915002800 5242	.01102397969 8969	.00198082893 5158
Residual	- .01091219391 6738	.01073873881 2506	.00000000000 0000	.00363698916 9268
Std. Residual	-2.967	2.920	.000	.989

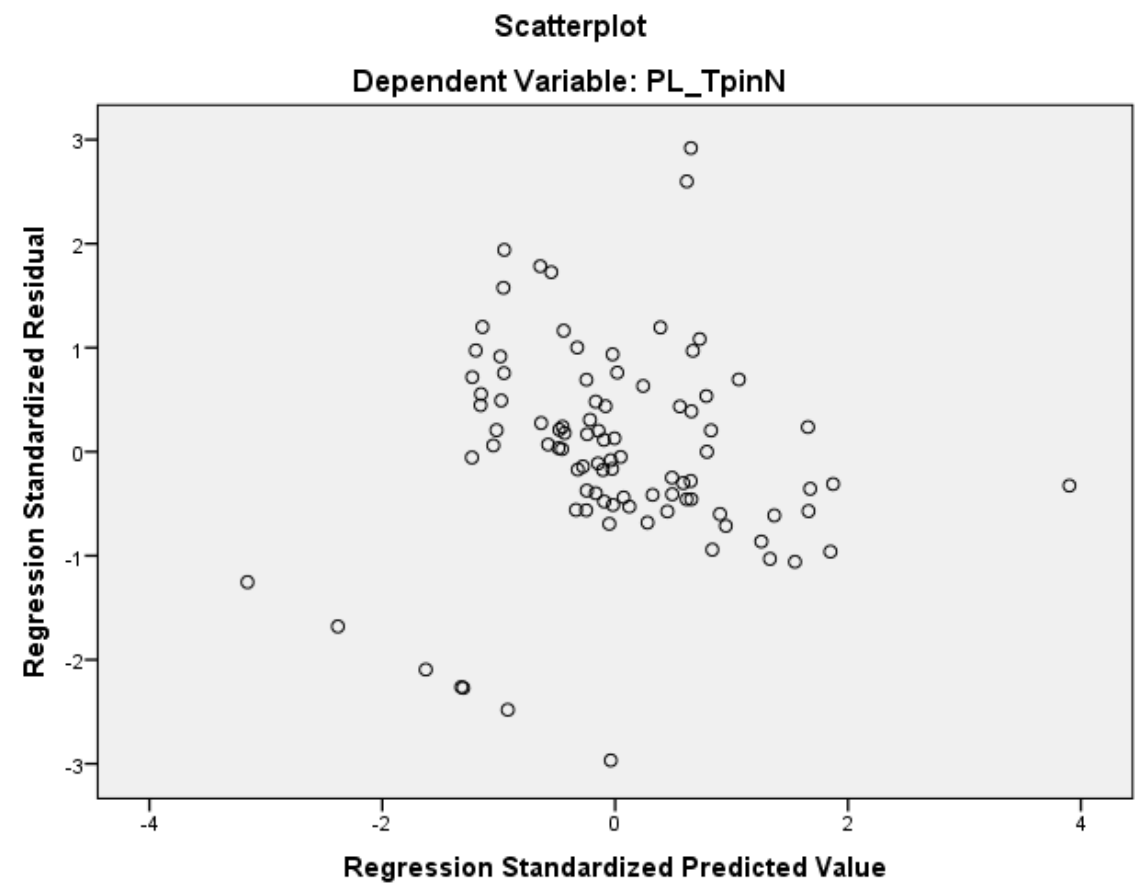
Stud. Residual	-2.995	2.995	-.004	1.009
Deleted Residual	-	-	-	-
	.01111938524	.01130222342	.00003496870	.00379185375
	9913	9084	9958	9931
Stud. Deleted Residual	-3.142	3.143	-.005	1.030
Mahal. Distance	.153	23.917	1.978	3.830
Cook's Distance	.000	.277	.015	.039
Centered Leverage Value	.002	.266	.022	.043

#### 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.

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## 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_TSpinN  /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	00:00:00.18
	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	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\_TSpinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.361 <sup>a</sup>	.130	.121	.00408892158 6064

2	.483 <sup>b</sup>	.234	.216	.00386044588 9570
---	-------------------	------	------	----------------------

- a. Predictors: (Constant), GD\_d
- b. Predictors: (Constant), GD\_d, Tpaths\_d
- c. Dependent Variable: PL\_TSpinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	13.353	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.000	2	.000	13.414	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

- a. Dependent Variable: PL\_TSpinN
- 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)	.008	.001		7.590	.000
	GD_d	.304	.083	.361	3.654	.000
2	(Constant)	.015	.002		6.349	.000
	GD_d	.545	.105	.648	5.179	.000
	Tpaths_d	-.931	.270	-.431	-3.442	.001

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.556	1.798
	Tpaths_d	.556	1.798

a. Dependent Variable: PL\_TSpinN

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

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

					Correlation	Tolerance	VIF
1	Tpaths_d	-.431 <sup>b</sup>	-3.442	.001	-.344	.556	1.798
	TSpaths_d	-.302 <sup>b</sup>	-2.768	.007	-.283	.762	1.312
	AvgPL_d	-.509 <sup>b</sup>	-2.855	.005	-.291	.285	3.511
	AvgGL_d	-.244 <sup>b</sup>	-1.526	.131	-.161	.376	2.660
2	TSpaths_d	.256 <sup>c</sup>	.917	.362	.098	.112	8.934
	AvgPL_d	-.222 <sup>c</sup>	-.997	.322	-.106	.176	5.675
	AvgGL_d	.199 <sup>c</sup>	.966	.337	.103	.205	4.871

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376
2	TSpaths_d	.082
	AvgPL_d	.176
	AvgGL_d	.205

a. Dependent Variable: PL\_TSpinN

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 Index	Variance Proportions		
				(Constant)	GD_d	Tpaths_d
1	1	1.905	1.000	.05	.05	
	2	.095	4.482	.95	.95	
2	1	2.887	1.000	.00	.01	.00
	2	.102	5.325	.09	.63	.01
	3	.011	16.181	.91	.36	.99

a. Dependent Variable: PL\_TSpinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00239400845 0210	.01832094602 2868	.01098901098 9011	.00210767503 6384
Std. Predicted Value	-4.078	3.479	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00331000168 8078	.01999709382 6532	.01102305787 5855	.00212641070 7858

Residual	- .01140159461 6473	.00998842250 5558	.00000000000 0000	.00381731106 2100
Std. Residual	-2.953	2.587	.000	.989
Stud. Residual	-2.981	2.607	-.004	1.007
Deleted Residual	- .01161807775 4974	.01013780757 7848	- .00003404688 6844	.00396614554 4067
Stud. Deleted Residual	-3.126	2.698	-.007	1.028
Mahal. Distance	.153	23.917	1.978	3.830
Cook's Distance	.000	.331	.013	.038
Centered Leverage Value	.002	.266	.022	.043

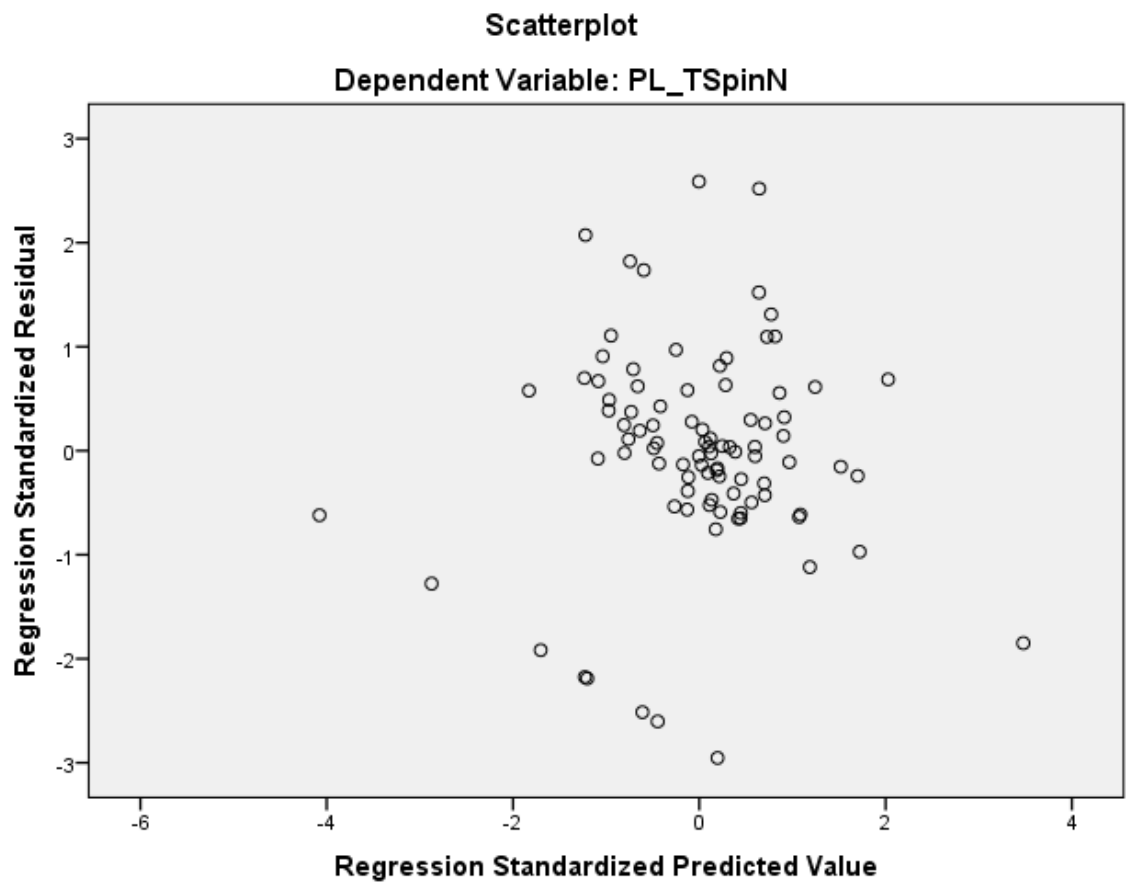
#### Residuals Statistics<sup>a</sup>

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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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	DataSet2



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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.
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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	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\_con

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.302 <sup>a</sup>	.091	.081	.05255326266 6921
2	.496 <sup>b</sup>	.246	.229	.04814704289 6595

a. Predictors: (Constant), AvgGL\_d

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

c. Dependent Variable: S\_con

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.025	1	.025	8.931	.004 <sup>b</sup>
	Residual	.246	89	.003		
	Total	.270	90			
2	Regression	.066	2	.033	14.338	.000 <sup>c</sup>
	Residual	.204	88	.002		
	Total	.270	90			

a. Dependent Variable: S\_con

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)	-.053	.022		-2.400	.019
	AvgGL_d	5.844	1.955	.302	2.989	.004
2	(Constant)	-.134	.028		-4.818	.000
	AvgGL_d	21.570	4.114	1.115	5.244	.000
	AvgPL_d	-8.335	1.963	-.903	-4.247	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_d	1.000	1.000
2	(Constant)		
	AvgGL_d	.190	5.273
	AvgPL_d	.190	5.273

a. Dependent Variable: S\_con

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.553 <sup>b</sup>	-3.572	.001	-.356	.376	2.660
	Tpaths_d	-.139 <sup>b</sup>	-.759	.450	-.081	.304	3.292
	TSpaths_d	.149 <sup>b</sup>	1.042	.300	.110	.499	2.003
	AvgPL_d	-.903 <sup>b</sup>	-4.247	.000	-.412	.190	5.273
2	GD_d	-.308 <sup>c</sup>	-1.786	.078	-.188	.280	3.565
	Tpaths_d	.035 <sup>c</sup>	.203	.840	.022	.286	3.497
	TSpaths_d	.019 <sup>c</sup>	.142	.888	.015	.472	2.120

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.376
	Tpaths_d	.304
	TSpaths_d	.499
	AvgPL_d	.190
2	GD_d	.141

Tpaths_d	.157
TSpaths_d	.131

a. Dependent Variable: S\_con

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 Index	Variance Proportions		
				(Constant)	AvgGL_d	AvgPL_d
1	1	1.969	1.000	.02	.02	
	2	.031	7.927	.98	.98	
2	1	2.873	1.000	.00	.00	.00
	2	.119	4.906	.13	.00	.19
	3	.008	19.390	.87	1.00	.81

a. Dependent Variable: S\_con

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

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

Predicted Value	- .02379940822 7205	.12900859117 5079	.01098901098 9011	.02717745539 9154
Std. Predicted Value	-1.280	4.343	.000	1.000
Standard Error of Predicted Value	.005	.027	.008	.004
Adjusted Predicted Value	- .02482340112 3285	.14290142059 3262	.01092386523 4738	.02810804389 6711
Residual	- .11362623423 3379	.36455771327 0187	.00000000000 0000	.04760907022 5047
Std. Residual	-2.360	7.572	.000	.989
Stud. Residual	-2.590	7.992	.001	1.038
Deleted Residual	- .13685037195 6825	.40617352724 0753	.00006514575 4273	.05251017490 1416
Stud. Deleted Residual	-2.679	15.178	.080	1.712
Mahal. Distance	.018	27.943	1.978	4.821
Cook's Distance	.000	2.431	.037	.259
Centered Leverage Value	.000	.310	.022	.054

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

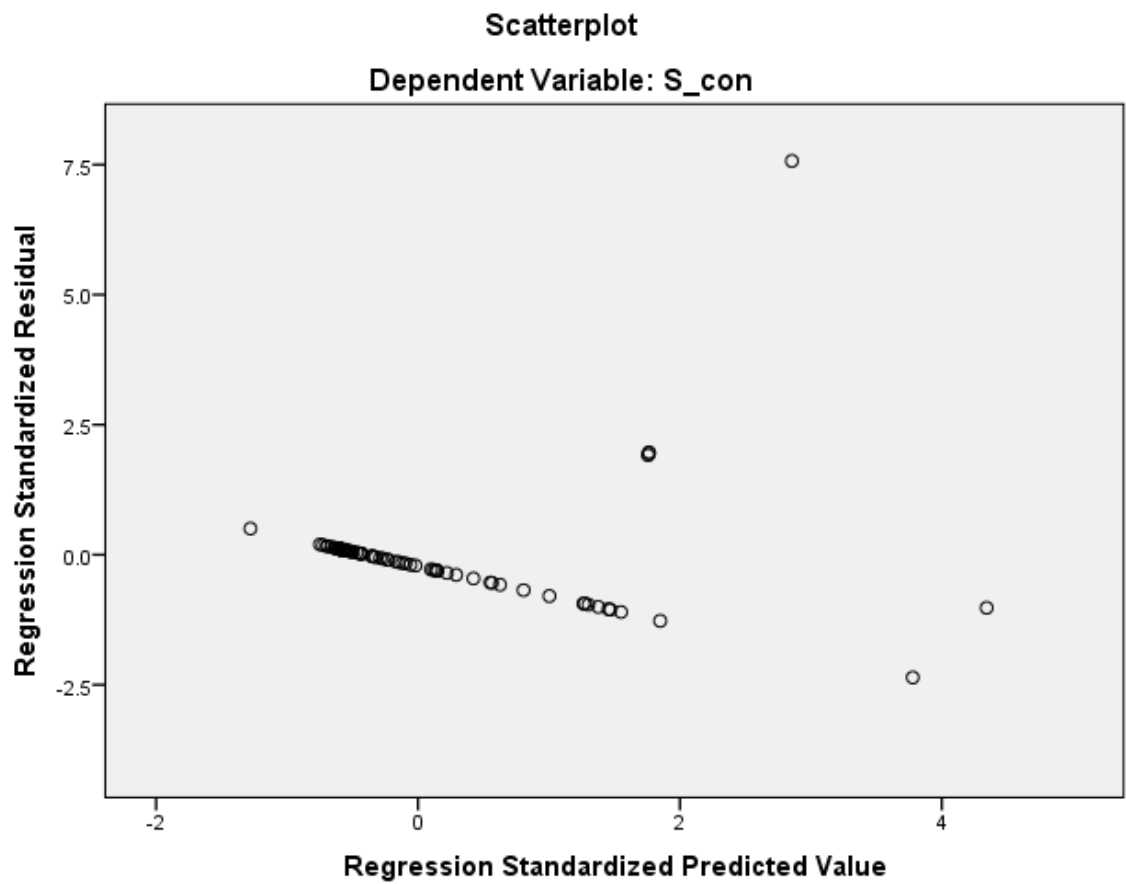
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Standard Error of Predicted Value	91

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

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Syntax		REGRESSION
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		ANOVA COLLIN TOL
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		/NOORIGIN
		/DEPENDENT R_con
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
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		,*ZPRED)
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**Variables Entered/Removed<sup>a</sup>**

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

1			Stepwise (Criteria: Probability-of- F-to-enter <=
	AvgGL_d		.050, Probability-of- F-to-remove >= .100).
2			Stepwise (Criteria: Probability-of- F-to-enter <=
	AvgPL_d		.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	.361 <sup>a</sup>	.130	.120	.00697385323 5364
2	.540 <sup>b</sup>	.292	.275	.00632861265 1989

a. Predictors: (Constant), AvgGL\_d

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

c. Dependent Variable: R\_con

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	13.299	.000 <sup>b</sup>
	Residual	.004	89	.000		
	Total	.005	90			
2	Regression	.001	2	.001	18.111	.000 <sup>c</sup>
	Residual	.004	88	.000		
	Total	.005	90			

a. Dependent Variable: R\_con

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)	.001	.003		.201	.841

	AvgGL_d	.946	.259	.361	3.647	.000
2	(Constant)	-.011	.004		-2.909	.005
	AvgGL_d	3.127	.541	1.191	5.783	.000
	AvgPL_d	-1.156	.258	-.923	-4.480	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_d	1.000	1.000
2	(Constant)		
	AvgGL_d	.190	5.273
	AvgPL_d	.190	5.273

a. Dependent Variable: R\_con

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.498 <sup>b</sup>	-3.247	.002	-.327	.376	2.660
	Tpaths_d	-.195 <sup>b</sup>	-1.090	.278	-.115	.304	3.292
	TSpaths_d	.111 <sup>b</sup>	.791	.431	.084	.499	2.003

	AvgPL_d	-.923 <sup>b</sup>	-4.480	.000	-.431	.190	5.273
2	GD_d	-.224 <sup>c</sup>	-1.328	.188	-.141	.280	3.565
	Tpaths_d	-.020 <sup>c</sup>	-.119	.906	-.013	.286	3.497
	TSpaths_d	-.024 <sup>c</sup>	-.184	.855	-.020	.472	2.120

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.376
	Tpaths_d	.304
	TSpaths_d	.499
	AvgPL_d	.190
2	GD_d	.141
	Tpaths_d	.157
	TSpaths_d	.131

a. Dependent Variable: R\_con

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	1.969	1.000	.02	.02	
	2	.031	7.927	.98	.98	
2	1	2.873	1.000	.00	.00	.00
	2	.119	4.906	.13	.00	.19
	3	.008	19.390	.87	1.00	.81

a. Dependent Variable: R\_con

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00617350870 7434	.02836940437 5553	.01098901098 9011	.00401491713 7183
Std. Predicted Value	-1.199	4.329	.000	1.000
Standard Error of Predicted Value	.001	.004	.001	.001
Adjusted Predicted Value	.00600693142 0416	.03075009211 8979	.01099284328 3686	.00416062535 5623
Residual	- .01521397568 2855	.04533531889 3194	.00000000000 0000	.00625789967 6680
Std. Residual	-2.404	7.164	.000	.989
Stud. Residual	-2.638	7.561	.000	1.037



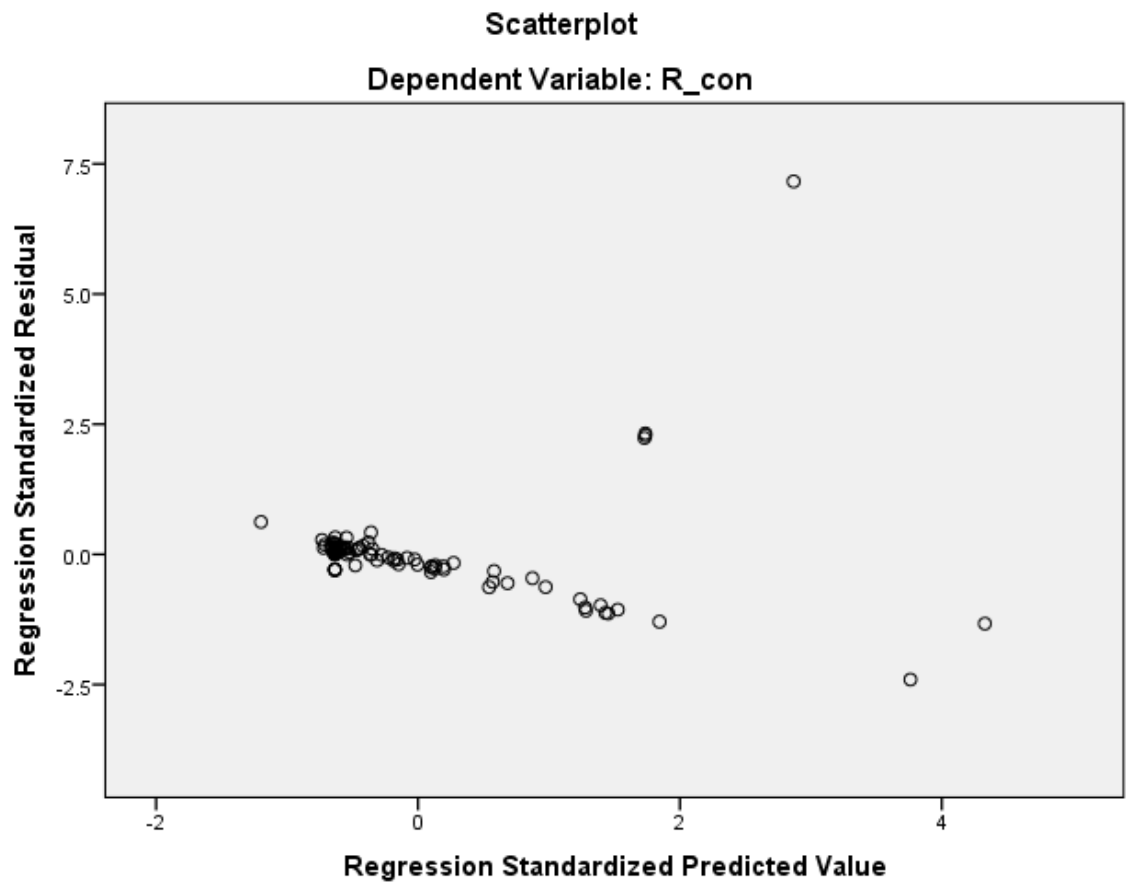
Deleted Residual	- .01832357048 9883	.05051054060 4591	- .00000383229 4675	.00689519315 9605
Stud. Deleted Residual	-2.734	12.703	.057	1.499
Mahal. Distance	.018	27.943	1.978	4.821
Cook's Distance	.000	2.176	.037	.234
Centered Leverage Value	.000	.310	.022	.054

**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.

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## Regression

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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 SMSP_d  /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_5	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).
2	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: SMSP\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682 <sup>a</sup>	.465	.459	.05647960211 4532
2	.725 <sup>b</sup>	.526	.515	.05343804021 5947
3	.755 <sup>c</sup>	.570	.556	.05116550526 5364

a. Predictors: (Constant), AvgPL\_d

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

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

d. Dependent Variable: SMSP\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.246	1	.246	77.207	.000 <sup>b</sup>
	Residual	.284	89	.003		
	Total	.530	90			
2	Regression	.279	2	.139	48.833	.000 <sup>c</sup>
	Residual	.251	88	.003		
	Total	.530	90			
3	Regression	.302	3	.101	38.508	.000 <sup>d</sup>

Residual	.228	87	.003		
Total	.530	90			

a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), AvgPL\_d

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

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.086	.013		-6.862	.000
	AvgPL_d	8.810	1.003	.682	8.787	.000
2	(Constant)	-.066	.013		-5.012	.000
	AvgPL_d	13.890	1.778	1.075	7.814	.000
	GD_d	-6.873	2.034	-.465	-3.379	.001
3	(Constant)	.015	.030		.491	.625
	AvgPL_d	19.027	2.415	1.472	7.879	.000
	GD_d	-6.147	1.962	-.416	-3.133	.002
	AvgGL_d	-13.208	4.405	-.488	-2.998	.004

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_d	1.000	1.000
2	(Constant)		
	AvgPL_d	.285	3.511
	GD_d	.285	3.511
3	(Constant)		
	AvgPL_d	.141	7.068
	GD_d	.280	3.565
	AvgGL_d	.187	5.354

a. Dependent Variable: SMSP\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.465 <sup>b</sup>	-3.379	.001	-.339	.285	3.511
	Tpaths_d	-.017 <sup>b</sup>	-.128	.899	-.014	.345	2.897
	TSpaths_d	-.136 <sup>b</sup>	-1.461	.148	-.154	.681	1.468



	AvgGL_d	-.550 <sup>b</sup>	-3.252	.002	-.328	.190	5.273
2	Tpaths_d	-.041 <sup>c</sup>	-.329	.743	-.035	.344	2.907
	TSpaths_d	-.130 <sup>c</sup>	-1.467	.146	-.155	.681	1.469
	AvgGL_d	-.488 <sup>c</sup>	-2.998	.004	-.306	.187	5.354
3	Tpaths_d	.136 <sup>d</sup>	1.027	.307	.110	.282	3.548
	TSpaths_d	.018 <sup>d</sup>	.174	.862	.019	.470	2.127

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.285
	Tpaths_d	.345
	TSpaths_d	.681
	AvgGL_d	.190
2	Tpaths_d	.176
	TSpaths_d	.254
	AvgGL_d	.141
3	Tpaths_d	.131
	TSpaths_d	.129

a. Dependent Variable: SMSP\_d

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

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

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

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgPL_d	GD_d
1	1	1.881	1.000	.06	.06	
	2	.119	3.974	.94	.94	
2	1	2.836	1.000	.02	.01	.01
	2	.133	4.612	.90	.12	.03
	3	.030	9.644	.08	.88	.96
3	1	3.821	1.000	.00	.00	.00
	2	.138	5.262	.13	.07	.05
	3	.033	10.761	.00	.30	.95
	4	.008	22.375	.87	.63	.00

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		AvgGL_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.00
	3	.02
	4	.97

a. Dependent Variable: SMSP\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .03633873909 7118	.33855581283 5693	.01098901098 9011	.05796868096 6299
Std. Predicted Value	-.816	5.651	.000	1.000
Standard Error of Predicted Value	.006	.031	.010	.005
Adjusted Predicted Value	- .04154562205 0762	.32810547947 8836	.01020616170 6738	.05576714905 8079
Residual	- .24168722331 5239	.34399494528 7704	.00000000000 0000	.05030551955 8904
Std. Residual	-4.724	6.723	.000	.983
Stud. Residual	-5.394	7.961	.007	1.121

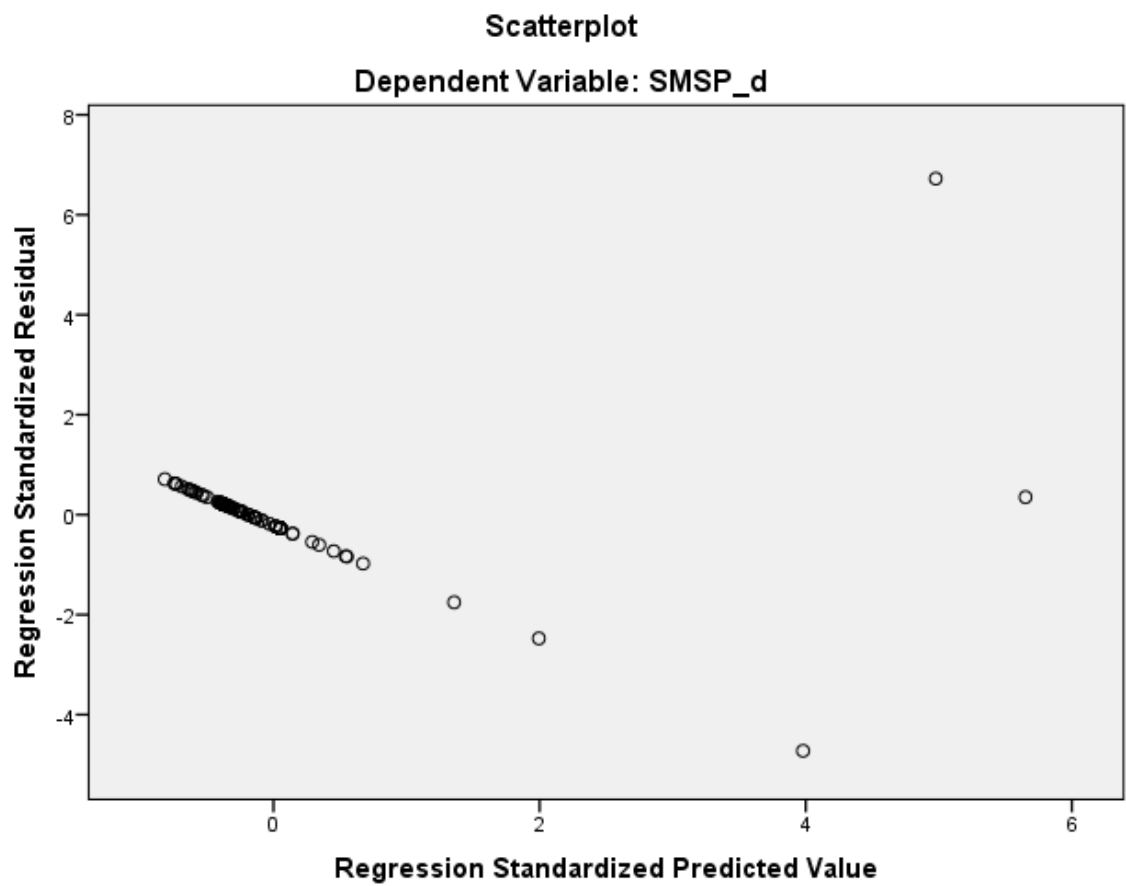
Deleted Residual	- .31515488028 5263	.48237925767 8986	.00078284928 2273	.06576108331 1082
Stud. Deleted Residual	-6.574	15.193	.072	1.809
Mahal. Distance	.153	32.126	2.967	5.099
Cook's Distance	.000	6.375	.098	.705
Centered Leverage Value	.002	.357	.033	.057

**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 TSpaths_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	00:00:00.16
	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	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).
3	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_con



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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.244 <sup>a</sup>	.060	.049	.02789194513 9064
2	.482 <sup>b</sup>	.232	.214	.02535323419 0429
3	.516 <sup>c</sup>	.267	.241	.02491761155 2880

a. Predictors: (Constant), AvgGL\_d

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

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

d. Dependent Variable: S\_con

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	5.582	.020 <sup>b</sup>
	Residual	.068	88	.001		
	Total	.073	89			
2	Regression	.017	2	.008	13.131	.000 <sup>c</sup>
	Residual	.056	87	.001		
	Total	.073	89			

3	Regression	.019	3	.006	10.419	.000 <sup>d</sup>
	Residual	.053	86	.001		
	Total	.073	89			

a. Dependent Variable: S\_con

b. Predictors: (Constant), AvgGL\_d

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

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.021	.012		-1.782	.078
	AvgGL_d	2.507	1.061	.244	2.363	.020
2	(Constant)	-.069	.015		-4.502	.000
	AvgGL_d	11.555	2.264	1.126	5.103	.000
	AvgPL_d	-4.686	1.061	-.974	-4.417	.000
3	(Constant)	-.068	.015		-4.482	.000
	AvgGL_d	12.210	2.249	1.190	5.429	.000
	AvgPL_d	-3.529	1.190	-.734	-2.965	.004
	GD_d	-1.936	.960	-.353	-2.017	.047

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_d	1.000	1.000
2	(Constant)		
	AvgGL_d	.181	5.512
	AvgPL_d	.181	5.512
3	(Constant)		
	AvgGL_d	.178	5.629
	AvgPL_d	.139	7.180
	GD_d	.279	3.585

a. Dependent Variable: S\_con

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.603 <sup>b</sup>	-3.768	.000	-.375	.363	2.753
	Tpaths_d	-.255 <sup>b</sup>	-1.387	.169	-.147	.313	3.195
	TSpaths_d	.068 <sup>b</sup>	.474	.637	.051	.518	1.929

	AvgPL_d	-.974 <sup>b</sup>	-4.417	.000	-.428	.181	5.512
2	GD_d	-.353 <sup>c</sup>	-2.017	.047	-.213	.279	3.585
	Tpaths_d	-.076 <sup>c</sup>	-.436	.664	-.047	.294	3.404
	TSpaths_d	-.061 <sup>c</sup>	-.455	.650	-.049	.494	2.026
3	Tpaths_d	-.117 <sup>d</sup>	-.682	.497	-.074	.290	3.450
	TSpaths_d	-.075 <sup>d</sup>	-.566	.573	-.061	.492	2.032

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.363
	Tpaths_d	.313
	TSpaths_d	.518
	AvgPL_d	.181
2	GD_d	.139
	Tpaths_d	.154
	TSpaths_d	.131
3	Tpaths_d	.129
	TSpaths_d	.128

a. Dependent Variable: S\_con

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

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

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

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_d	AvgPL_d
1	1	1.969	1.000	.02	.02	
	2	.031	8.012	.98	.98	
2	1	2.872	1.000	.00	.00	.00
	2	.121	4.877	.12	.00	.18
	3	.007	20.038	.88	1.00	.81
3	1	3.820	1.000	.00	.00	.00
	2	.140	5.227	.12	.00	.06
	3	.033	10.744	.00	.02	.31
	4	.007	23.109	.88	.98	.63

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		GD_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.05
	3	.95
	4	.00

a. Dependent Variable: S\_con

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .02140441350 6389	.06606782972 8127	.00607623956 2010	.01476664130 6563
Std. Predicted Value	-1.861	4.063	.000	1.000
Standard Error of Predicted Value	.003	.015	.005	.002
Adjusted Predicted Value	- .02301774919 0331	.08038332313 2992	.00604238871 7047	.01516708043 2861
Residual	- .06465452909 4696	.11566045135 2596	.00000000000 0000	.02449405188 8144
Std. Residual	-2.595	4.642	.000	.983
Stud. Residual	-2.892	4.802	.001	1.022

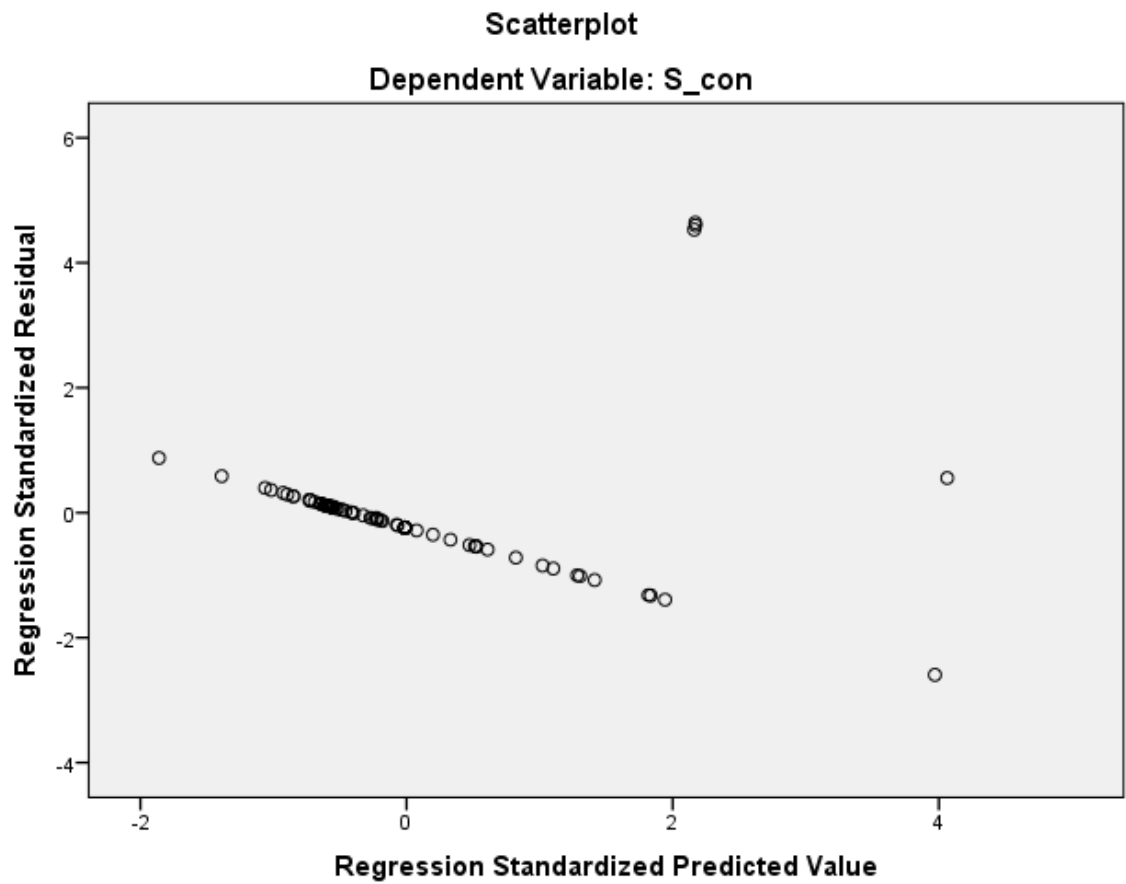
Deleted Residual	- .08033585548 4009	.12378524988 8897	.00003385084 4963	.02649712801 2834
Stud. Deleted Residual	-3.026	5.580	.024	1.145
Mahal. Distance	.150	31.839	2.967	5.172
Cook's Distance	.000	.507	.021	.088
Centered Leverage Value	.002	.358	.033	.058

**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 R_con

/METHOD=STEPWISE GD_d Tpaths_d TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

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## Regression

### Notes

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	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 R_con  /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	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	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	.335 <sup>a</sup>	.112	.102	.00415060964 3389

2	.526 <sup>b</sup>	.277	.260	.00376707809 5418
---	-------------------	------	------	----------------------

a. Predictors: (Constant), AvgGL\_d

b. Predictors: (Constant), AvgGL\_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	11.100	.001 <sup>b</sup>
	Residual	.002	88	.000		
	Total	.002	89			
2	Regression	.000	2	.000	16.653	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			

a. Dependent Variable: R\_con

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)	.005	.002		2.589	.011
	AvgGL_d	.526	.158	.335	3.332	.001
2	(Constant)	-.003	.002		-1.111	.270
	AvgGL_d	1.882	.336	1.197	5.593	.000
	AvgPL_d	-.702	.158	-.953	-4.453	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_d	1.000	1.000
2	(Constant)		
	AvgGL_d	.181	5.512
	AvgPL_d	.181	5.512

a. Dependent Variable: R\_con

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

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

					Correlation	Tolerance	VIF
1	GD_d	-.467 <sup>b</sup>	-2.920	.004	-.299	.363	2.753
	Tpaths_d	-.320 <sup>b</sup>	-1.808	.074	-.190	.313	3.195
	TSpaths_d	.010 <sup>b</sup>	.072	.943	.008	.518	1.929
	AvgPL_d	-.953 <sup>b</sup>	-4.453	.000	-.431	.181	5.512
2	GD_d	-.186 <sup>c</sup>	-1.076	.285	-.115	.279	3.585
	Tpaths_d	-.150 <sup>c</sup>	-.890	.376	-.096	.294	3.404
	TSpaths_d	-.119 <sup>c</sup>	-.919	.361	-.099	.494	2.026

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.363
	Tpaths_d	.313
	TSpaths_d	.518
	AvgPL_d	.181
2	GD_d	.139
	Tpaths_d	.154
	TSpaths_d	.131

a. Dependent Variable: R\_con

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 Index	Variance Proportions		
				(Constant)	AvgGL_d	AvgPL_d
1	1	1.969	1.000	.02	.02	
	2	.031	8.012	.98	.98	
2	1	2.872	1.000	.00	.00	.00
	2	.121	4.877	.12	.00	.18
	3	.007	20.038	.88	1.00	.81

a. Dependent Variable: R\_con

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00750770512 9683	.02085838466 8827	.01035732515 6705	.00230446740 6445
Std. Predicted Value	-1.237	4.557	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00739533687 0104	.02149673923 8501	.01036085095 2600	.00239925428 0642

Residual	- .00861992686 9869	.01803958043 4561	.00000000000 0000	.00372451087 4752
Std. Residual	-2.288	4.789	.000	.989
Stud. Residual	-2.540	4.917	.000	1.020
Deleted Residual	- .01062474027 2760	.01901664584 8751	- .00000352579 5895	.00396788867 8319
Stud. Deleted Residual	-2.625	5.752	.025	1.151
Mahal. Distance	.027	27.631	1.978	4.898
Cook's Distance	.000	.500	.023	.092
Centered Leverage Value	.000	.310	.022	.055

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

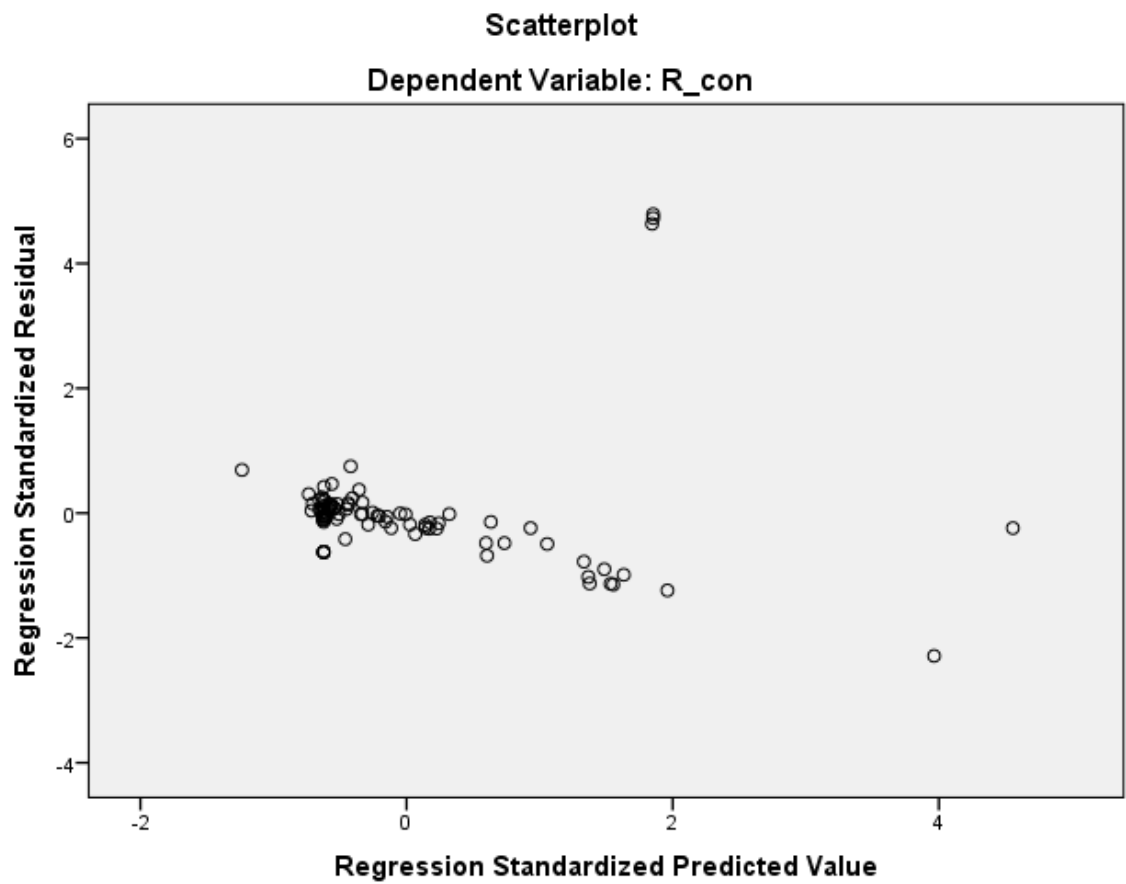
	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	90
Residual	90
Std. Residual	90
Stud. Residual	90
Deleted Residual	90
Stud. Deleted Residual	90
Mahal. Distance	90



Cook's Distance	90
Centered Leverage Value	90

a. Dependent Variable: 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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Comments		
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Missing Value Handling	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	89
	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	00:00:00.16
	Elapsed Time	00:00:00.18
	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	AvgPL_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).

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

a. Dependent Variable: SMSP\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778 <sup>a</sup>	.605	.601	.04904402929 8237
2	.825 <sup>b</sup>	.680	.673	.04439898952 1160
3	.846 <sup>c</sup>	.715	.705	.04215016287 5740

a. Predictors: (Constant), AvgPL\_d

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

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

d. Dependent Variable: SMSP\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.321	1	.321	133.322	.000 <sup>b</sup>
	Residual	.209	87	.002		
	Total	.530	88			
2	Regression	.360	2	.180	91.417	.000 <sup>c</sup>
	Residual	.170	86	.002		
	Total	.530	88			
3	Regression	.379	3	.126	71.095	.000 <sup>d</sup>
	Residual	.151	85	.002		
	Total	.530	88			

a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), AvgPL\_d

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

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

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

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

1	(Constant)	-.109	.012		-9.375	.000
	AvgPL_d	11.333	.982	.778	11.547	.000
2	(Constant)	.001	.027		.048	.961
	AvgPL_d	19.161	1.957	1.315	9.791	.000
	AvgGL_d	-17.937	3.995	-.603	-4.490	.000
3	(Constant)	.005	.026		.210	.834
	AvgPL_d	22.137	2.074	1.519	10.674	.000
	AvgGL_d	-16.023	3.839	-.539	-4.174	.000
	GD_d	-5.261	1.630	-.323	-3.228	.002

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_d	1.000	1.000
2	(Constant)		
	AvgPL_d	.206	4.850
	AvgGL_d	.206	4.850
3	(Constant)		
	AvgPL_d	.165	6.045
	AvgGL_d	.201	4.969
	GD_d	.335	2.984

a. Dependent Variable: SMSP\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.387 <sup>b</sup>	-3.592	.001	-.361	.343	2.912
	Tpaths_d	-.183 <sup>b</sup>	-1.585	.117	-.168	.334	2.998
	TSpaths_d	-.179 <sup>b</sup>	-2.263	.026	-.237	.691	1.447
	AvgGL_d	-.603 <sup>b</sup>	-4.490	.000	-.436	.206	4.850
2	GD_d	-.323 <sup>c</sup>	-3.228	.002	-.330	.335	2.984
	Tpaths_d	-.009 <sup>c</sup>	-.077	.939	-.008	.288	3.475
	TSpaths_d	-.010 <sup>c</sup>	-.116	.908	-.013	.503	1.989
3	Tpaths_d	-.043 <sup>d</sup>	-.393	.695	-.043	.285	3.508
	TSpaths_d	-.022 <sup>d</sup>	-.263	.793	-.029	.502	1.993

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.343
	Tpaths_d	.334
	TSpaths_d	.691



	AvgGL_d	.206
2	GD_d	.165
	Tpaths_d	.178
	TSpaths_d	.150
3	Tpaths_d	.148
	TSpaths_d	.146

a. Dependent Variable: SMSP\_d

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

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgPL_d	AvgGL_d
1	1	1.895	1.000	.05	.05	
	2	.105	4.256	.95	.95	
2	1	2.888	1.000	.00	.00	.00
	2	.105	5.246	.14	.21	.00
	3	.007	19.839	.86	.79	1.00
3	1	3.837	1.000	.00	.00	.00
	2	.120	5.649	.14	.08	.00

3	.036	10.339	.00	.30	.02
4	.007	22.870	.86	.62	.98

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

Model	Dimension	Variance Proportions
		GD_d
1	1	
	2	
2	1	
	2	
	3	
3	1	.00
	2	.06
	3	.93
	4	.00

a. Dependent Variable: SMSP\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .03495049849 1526	.41883102059 3643	.01123595505 6180	.06562030682 2678

Std. Predicted Value	-.704	6.211	.000	1.000
Standard Error of Predicted Value	.005	.028	.008	.004
Adjusted Predicted Value	- .03640921786 4275	.47023412585 2585	.01028048662 7692	.06267982367 7654
Residual	- .15904234349 7276	.26920729875 5646	.00000000000 0000	.04142546422 4694
Std. Residual	-3.773	6.387	.000	.983
Stud. Residual	-3.923	7.982	.010	1.130
Deleted Residual	- .17194673418 9987	.42049396038 0554	.00095546842 8488	.05579552327 1050
Stud. Deleted Residual	-4.310	15.858	.091	1.857
Mahal. Distance	.143	38.786	2.966	5.684
Cook's Distance	.000	8.952	.118	.952
Centered Leverage Value	.002	.441	.034	.065

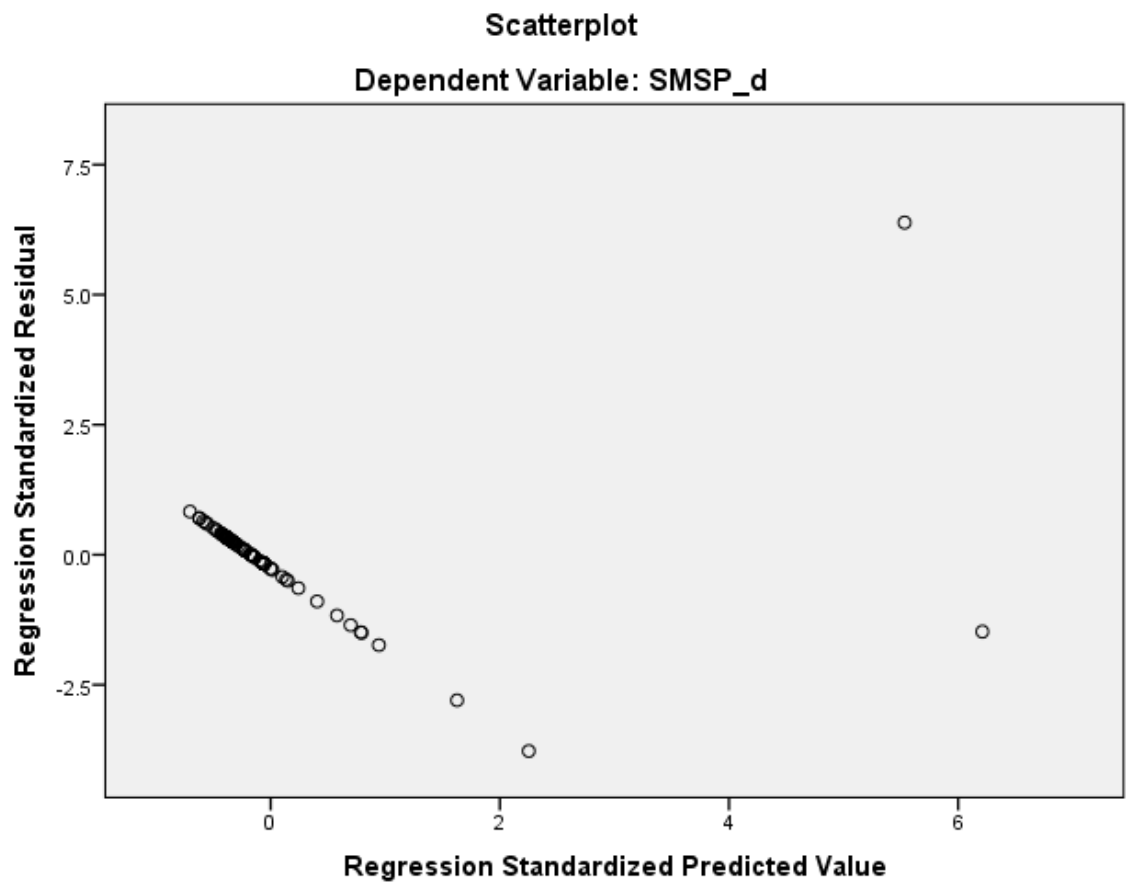
#### Residuals Statistics<sup>a</sup>

	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 SMSP\_d

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

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

/SAVE COOK.

## Regression

### Notes

Output Created		06-JUN-2015 11:45:27
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	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 SMSP_d  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.20
	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	AvgPL_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).
3	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: SMSP\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
-------	---	----------	-------------------	----------------------------



1	.735 <sup>a</sup>	.540	.535	.02592773548 8375
2	.796 <sup>b</sup>	.633	.625	.02327773886 7209
3	.836 <sup>c</sup>	.699	.688	.02121714040 6306

a. Predictors: (Constant), AvgPL\_d

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

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

d. Dependent Variable: SMSP\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.068	1	.068	100.915	.000 <sup>b</sup>
	Residual	.058	86	.001		
	Total	.126	87			
2	Regression	.080	2	.040	73.448	.000 <sup>c</sup>
	Residual	.046	85	.001		
	Total	.126	87			
3	Regression	.088	3	.029	65.042	.000 <sup>d</sup>
	Residual	.038	84	.000		

Total	.126	87			
-------	------	----	--	--	--

a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), AvgPL\_d

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

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.060	.007		-8.645	.000
	AvgPL_d	6.231	.620	.735	10.046	.000
2	(Constant)	-.002	.014		-.121	.904
	AvgPL_d	10.974	1.161	1.294	9.456	.000
	AvgGL_d	-10.055	2.159	-.637	-4.658	.000
3	(Constant)	.001	.013		.088	.930
	AvgPL_d	13.257	1.185	1.563	11.190	.000
	AvgGL_d	-9.036	1.982	-.573	-4.559	.000
	GD_d	-3.541	.828	-.416	-4.279	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_d	1.000	1.000
2	(Constant)		
	AvgPL_d	.230	4.342
	AvgGL_d	.230	4.342
3	(Constant)		
	AvgPL_d	.184	5.447
	AvgGL_d	.227	4.406
	GD_d	.380	2.633

a. Dependent Variable: SMSP\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.469 <sup>b</sup>	-4.379	.000	-.429	.385	2.595
	Tpaths_d	-.200 <sup>b</sup>	-1.743	.085	-.186	.397	2.519
	TSpaths_d	-.264 <sup>b</sup>	-3.265	.002	-.334	.735	1.361
	AvgGL_d	-.637 <sup>b</sup>	-4.658	.000	-.451	.230	4.342

2	GD_d	-.416 <sup>c</sup>	-4.279	.000	-.423	.380	2.633
	Tpaths_d	-.028 <sup>c</sup>	-.247	.806	-.027	.345	2.900
	TSpaths_d	-.107 <sup>c</sup>	-1.200	.234	-.130	.535	1.869
3	Tpaths_d	-.070 <sup>d</sup>	-.686	.495	-.075	.342	2.927
	TSpaths_d	-.120 <sup>d</sup>	-1.478	.143	-.160	.534	1.871

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.385
	Tpaths_d	.397
	TSpaths_d	.735
	AvgGL_d	.230
2	GD_d	.184
	Tpaths_d	.200
	TSpaths_d	.168
3	Tpaths_d	.168
	TSpaths_d	.165

a. Dependent Variable: SMSP\_d

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

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgPL_d	AvgGL_d
1	1	1.918	1.000	.04	.04	
	2	.082	4.847	.96	.96	
2	1	2.911	1.000	.00	.00	.00
	2	.082	5.968	.18	.23	.00
	3	.007	20.076	.81	.77	1.00
3	1	3.858	1.000	.00	.00	.00
	2	.099	6.238	.17	.06	.00
	3	.036	10.425	.01	.31	.02
	4	.007	23.117	.81	.63	.98

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

Model	Dimension	Variance Proportions
		GD_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.12
	3	.88
	4	.00

a. Dependent Variable: SMSP\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .02272858470 6783	.25043949484 8251	.00405122138 7536	.03177493809 4562
Std. Predicted Value	-.843	7.754	.000	1.000
Standard Error of Predicted Value	.002	.018	.004	.002
Adjusted Predicted Value	- .02370979636 9076	.10706362128 2578	.00138943252 0148	.01887260491 7140
Residual	- .09517011791 4677	.10606799274 6830	.00000000000 0000	.02084811850 9820
Std. Residual	-4.486	4.999	.000	.983
Stud. Residual	-4.758	9.165	.043	1.303

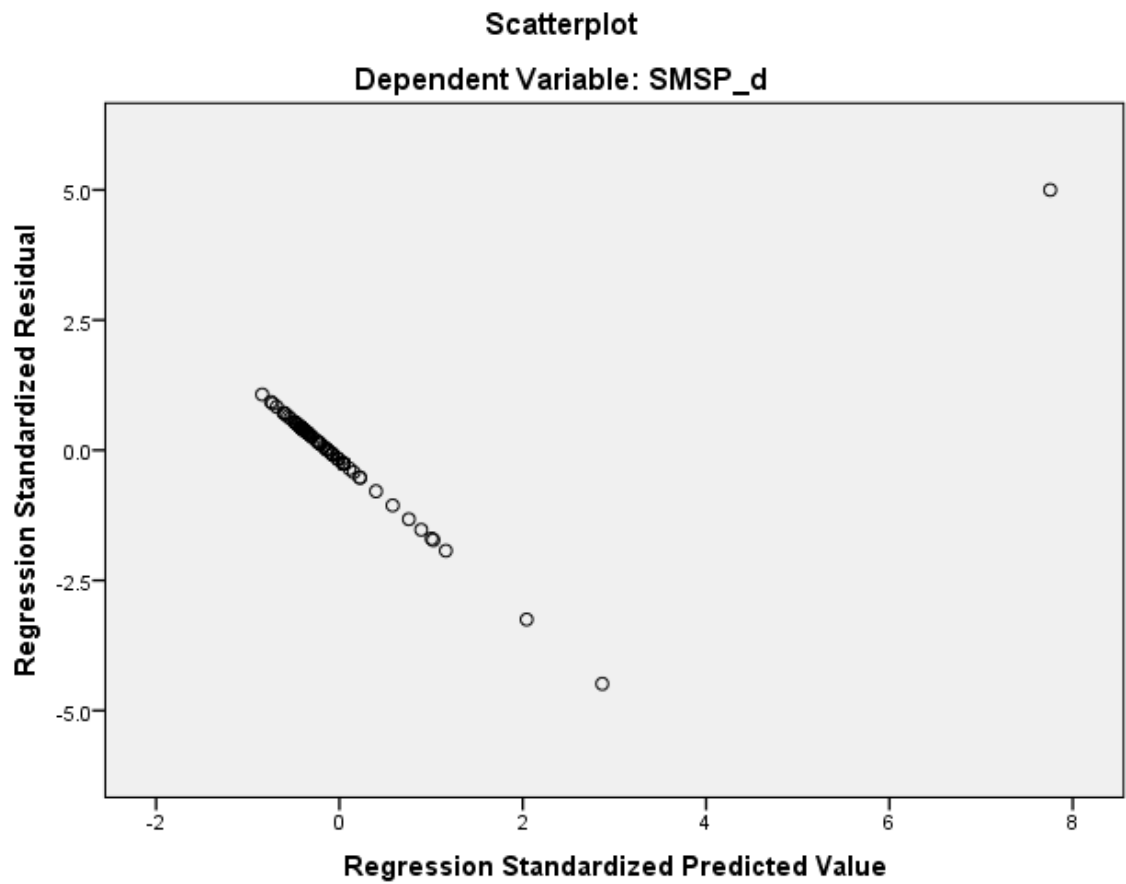
Deleted Residual	- .10706362128 2578	.35650748014 4501	.00266178886 7387	.04256586837 0405
Stud. Deleted Residual	-5.533	1.095	-.075	.923
Mahal. Distance	.135	60.127	2.966	6.851
Cook's Distance	.000	49.584	.579	5.285
Centered Leverage Value	.002	.691	.034	.079

**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	87
Mahal. Distance	88
Cook's Distance	88
Centered Leverage Value	88

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 TSpaths_d AvgPL_d AvgGL_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created	06-JUN-2015 11:46:06	
Comments		
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	86

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	00:00:00.03
	Elapsed Time	00:00:00.04
	Memory Required	6272 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_10	Cook's Distance

### Warnings

The dependent variable SMSP\_d is constant and has been deleted. Statistics cannot be computed.

### 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	06-JUN-2015 11:34:50	
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_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time	00:00:00.41

	Elapsed Time	00:00:00.38
	Memory Required	5920 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_1	Cook's Distance

[DataSet1]

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

Model	Variables Entered	Variables Removed	Method
1	SMSP_d		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	.444 <sup>a</sup>	.197	.188	.00467583863 1240
2	.607 <sup>b</sup>	.369	.354	.00416980133 5162

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, 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	21.856	.000 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	25.697	.000 <sup>c</sup>
	Residual	.002	88	.000		
	Total	.002	90			

a. Dependent Variable: GD\_d

b. Predictors: (Constant), SMSP\_d

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		21.524	.000
	SMSP_d	.030	.006	.444	4.675	.000
2	(Constant)	.005	.001		4.022	.000
	SMSP_d	.028	.006	.420	4.956	.000
	PL_TpinN	.517	.106	.415	4.890	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.997	1.003
	PL_TpinN	.997	1.003

a. Dependent Variable: GD\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	.415 <sup>b</sup>	4.890	.000	.462	.997	1.003
	PL_TSpinN	.329 <sup>b</sup>	3.696	.000	.367	.994	1.006
	S_con	.043 <sup>b</sup>	.451	.653	.048	.999	1.001
	R_con	.095 <sup>b</sup>	.999	.321	.106	1.000	1.000
2	PL_TSpinN	.016 <sup>c</sup>	.115	.909	.012	.392	2.550
	S_con	.008 <sup>c</sup>	.097	.923	.010	.992	1.008
	R_con	.023 <sup>c</sup>	.260	.795	.028	.969	1.032



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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpinN		.997
	PL_TSpinN		.994
	S_con		.999
	R_con		1.000
2	PL_TSpinN		.392
	S_con		.990
	R_con		.966

a. Dependent Variable: GD\_d

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	PL_TpinN
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	1.980	1.000	.03	.02	.03

2	.955	1.440	.00	.98	.00
3	.064	5.560	.97	.00	.97

a. Dependent Variable: GD\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00499009992 9273	.02907402813 4346	.01098901098 9011	.00315102880 6174
Std. Predicted Value	-1.904	5.739	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00460375146 9404	.03623184561 7294	.01105184284 5972	.00361473471 7815
Residual	- .00728274509 3107	.01725644245 7438	.00000000000 0000	.00412320991 3775
Std. Residual	-1.747	4.138	.000	.989
Stud. Residual	-1.759	4.224	-.004	1.005
Deleted Residual	- .00932601653 0395	.01798021234 5719	- .00006283185 6961	.00433035200 5400
Stud. Deleted Residual	-1.781	4.704	.002	1.034
Mahal. Distance	.020	68.087	1.978	7.604
Cook's Distance	.000	1.280	.022	.136

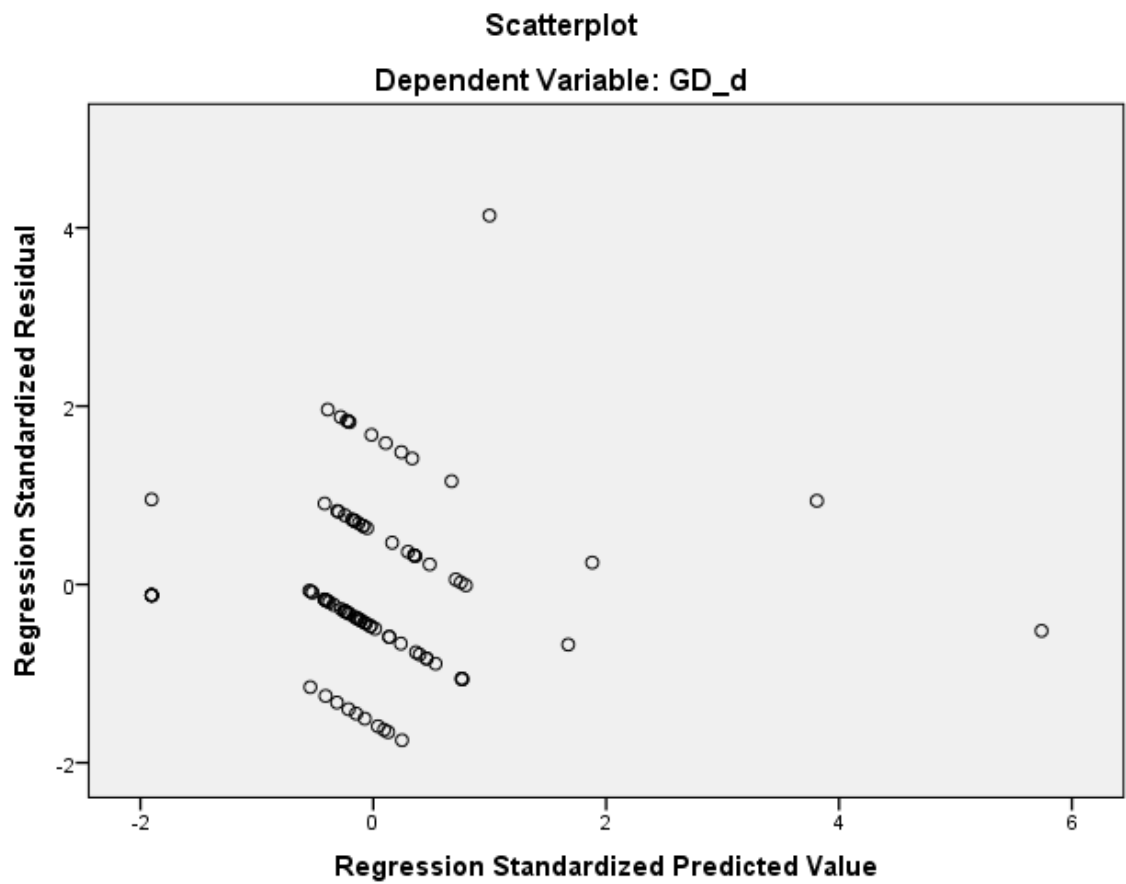
Centered Leverage Value	.000	.757	.022	.084
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#### Residuals Statistics<sup>a</sup>

	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: 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		06-JUN-2015 11:35:12
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_d
		/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d
		/SCATTERPLOT=(*ZRESID ,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.23
	Elapsed Time	00:00:00.23
	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	SMSP_d		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: Tpaths\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.546 <sup>a</sup>	.298	.290	.00170005276 8681
2	.595 <sup>b</sup>	.354	.340	.00163930341 5598

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, R\_con

c. Dependent Variable: Tpaths\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	37.740	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	24.154	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: Tpaths\_d

b. Predictors: (Constant), SMSP\_d

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		60.157	.000



	SMSP_d	.014	.002	.546	6.143	.000
2	(Constant)	.010	.000		32.791	.000
	SMSP_d	.014	.002	.544	6.353	.000
	R_con	.065	.023	.238	2.778	.007

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	1.000	1.000
	R_con	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_TpinN	.107 <sup>b</sup>	1.201	.233	.127	.997	1.003
	PL_TSpinN	-.040 <sup>b</sup>	-.452	.652	-.048	.994	1.006
	S_con	.225 <sup>b</sup>	2.615	.011	.269	.999	1.001

	R_con	.238 <sup>b</sup>	2.778	.007	.284	1.000	1.000
2	PL_TpinN	.067 <sup>c</sup>	.762	.448	.081	.966	1.035
	PL_TSpinN	-.088 <sup>c</sup>	-1.003	.319	-.107	.960	1.041
	S_con	-.472 <sup>c</sup>	-.814	.418	-.087	.022	45.710

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.997
	PL_TSpinN	.994
	S_con	.999
	R_con	1.000
2	PL_TpinN	.966
	PL_TSpinN	.960
	S_con	.022

- a. Dependent Variable: Tpaths\_d
- b. Predictors in the Model: (Constant), SMSP\_d
- c. Predictors in the Model: (Constant), SMSP\_d, R\_con

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

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

			Index	(Constant)	SMSP_d	R_con
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	1.870	1.000	.08	.02	.08
	2	.960	1.396	.01	.97	.01
	3	.170	3.316	.91	.00	.91

a. Dependent Variable: Tpaths\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01054666005 0750	.02011449821 2934	.01098901098 9011	.00120100498 0820
Std. Predicted Value	-.368	7.598	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.01045652758 3301	.02587586268 7826	.01104787880 4090	.00170987660 2362
Residual	- .00210497924 1267	.00586887821 5551	.00000000000 0000	.00162098660 1420
Std. Residual	-1.284	3.580	.000	.989
Stud. Residual	-2.222	3.607	-.011	1.023

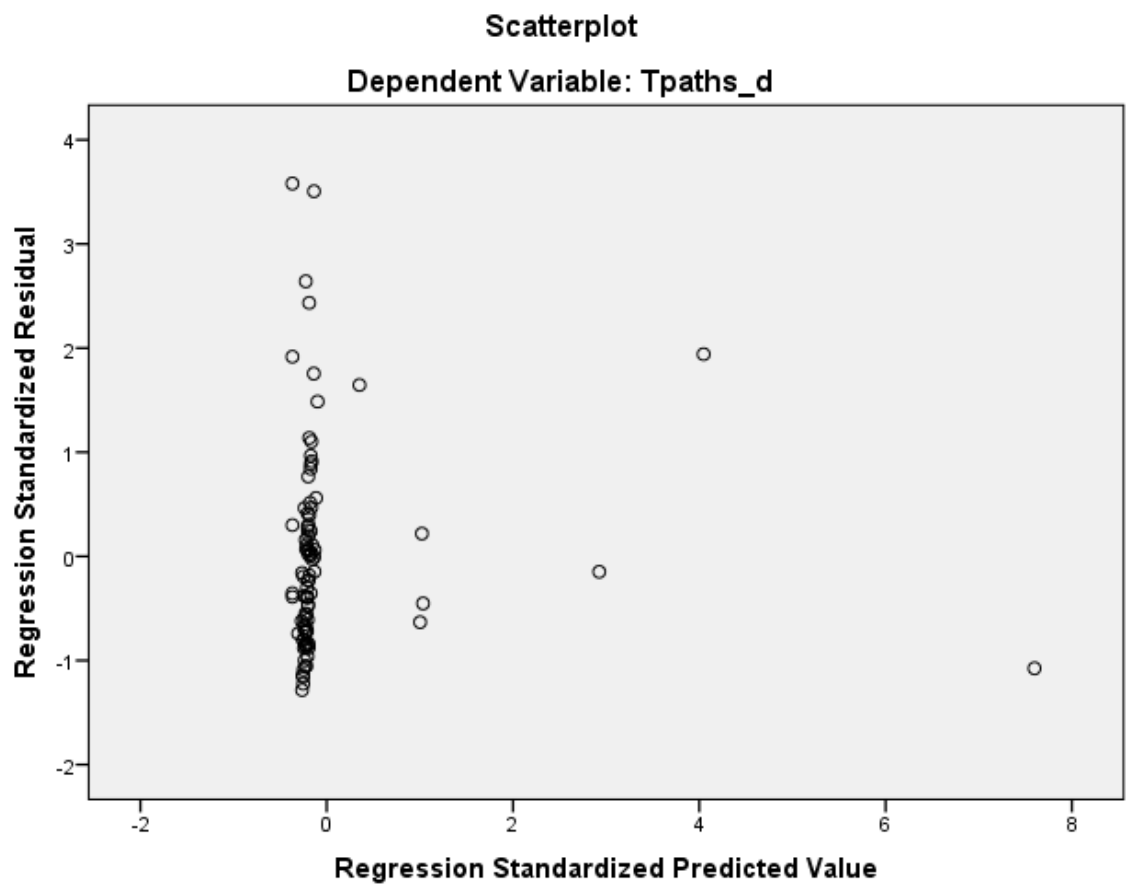
Deleted Residual	- .00752445170 6558	.00595901068 3000	- .00005886781 5079	.00183671878 6703
Stud. Deleted Residual	-2.274	3.886	-.002	1.053
Mahal. Distance	.021	67.923	1.978	9.605
Cook's Distance	.000	5.377	.069	.565
Centered Leverage Value	.000	.755	.022	.107

**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

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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 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	00:00:00.24
	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	R_con		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: TSpats\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.311 <sup>a</sup>	.096	.086	.00151583200 2393
2	.425 <sup>b</sup>	.180	.162	.00145179741 7594



a. Predictors: (Constant), R\_con

b. Predictors: (Constant), R\_con, 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	9.498	.003 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	9.689	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: TSpaths\_d

b. Predictors: (Constant), R\_con

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

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

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

		B	Std. Error	Beta		
1	(Constant)	.010	.000		36.050	.000
	R_con	.066	.021	.311	3.082	.003
2	(Constant)	.010	.000		37.310	.000
	R_con	.066	.021	.309	3.198	.002
	SMSP_d	.006	.002	.290	3.004	.003

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

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

a. Dependent Variable: TSpats\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	-.010 <sup>b</sup>	-.099	.921	-.011	.969	1.032

	PL_TSpinN	-.116 <sup>b</sup>	-1.129	.262	-.120	.966	1.035
	S_con	-.818 <sup>b</sup>	-1.236	.220	-.131	.023	43.359
	SMSP_d	.290 <sup>b</sup>	3.004	.003	.305	1.000	1.000
2	PL_TpinN	-.027 <sup>c</sup>	-.273	.786	-.029	.966	1.035
	PL_TSpinN	-.139 <sup>c</sup>	-1.418	.160	-.150	.960	1.041
	S_con	-.406 <sup>c</sup>	-.620	.537	-.066	.022	45.710

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.969
	PL_TSpinN	.966
	S_con	.023
	SMSP_d	1.000
2	PL_TpinN	.966
	PL_TSpinN	.960
	S_con	.022

a. Dependent Variable: TSpats\_d

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_con	SMSP_d
1	1	1.830	1.000	.09	.09	
	2	.170	3.277	.91	.91	
2	1	1.870	1.000	.08	.08	.02
	2	.960	1.396	.01	.01	.97
	3	.170	3.316	.91	.91	.00

a. Dependent Variable: TSpaths\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01063244231 0452	.01485804002 7320	.01098901098 9011	.00067366971 5518
Std. Predicted Value	-.529	5.743	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.01053587067 8723	.01573433168 2324	.01100673040 3244	.00078326106 5372
Residual	- .00192959920 9689	.00628822064 0272	.00000000000 0000	.00143557570 8258
Std. Residual	-1.329	4.331	.000	.989

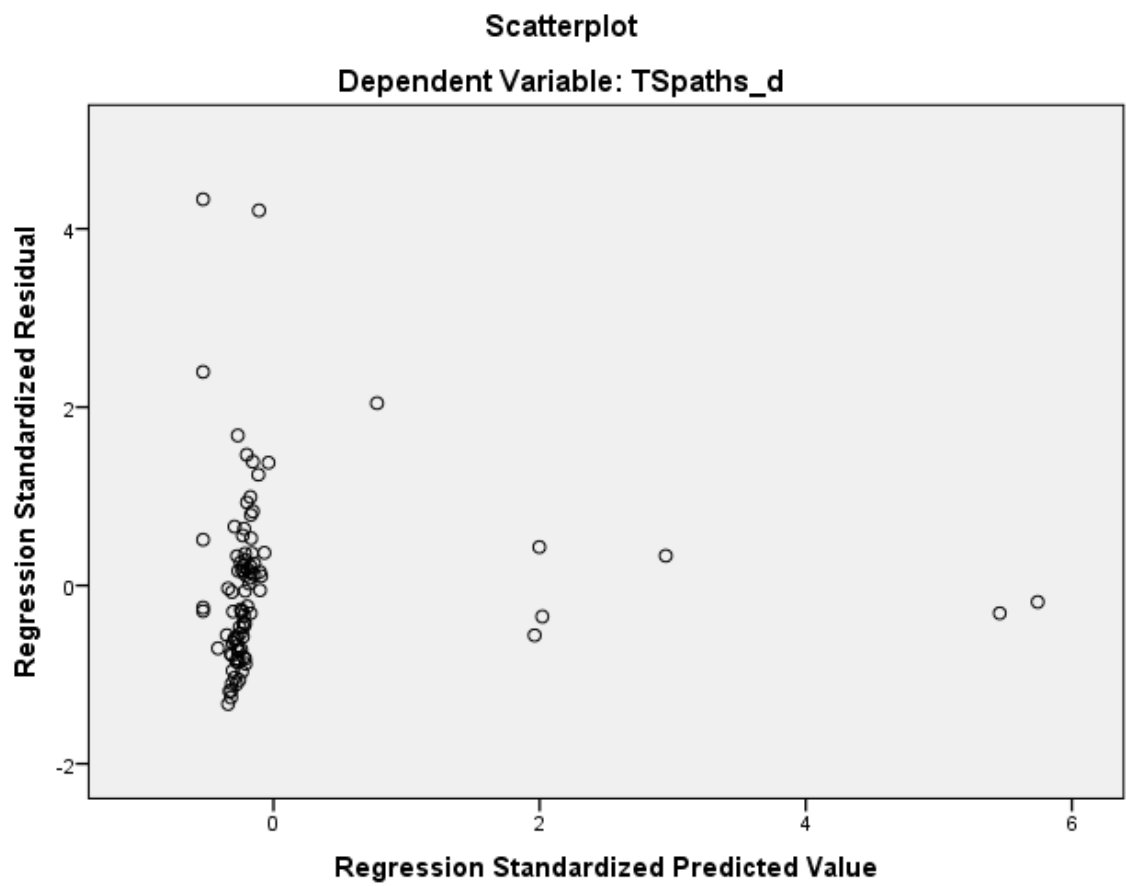
Stud. Residual	-1.337	4.364	-.004	.998
Deleted Residual	-	-	-	-
	.00195392733	.00638479320	.00001771941	.00146729142
	4398	3324	4233	6869
Stud. Deleted Residual	-1.344	4.903	.009	1.051
Mahal. Distance	.021	67.923	1.978	9.605
Cook's Distance	.000	.186	.009	.028
Centered Leverage Value	.000	.755	.022	.107

#### 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_TpinN PL_TSpinN S_con R_con SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		06-JUN-2015 11:35:48
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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_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.23
	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	SMSP_d		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).
3	PL_TSpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgPL\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682 <sup>a</sup>	.465	.459	.004369269597991
2	.736 <sup>b</sup>	.541	.531	.004066885267553
3	.755 <sup>c</sup>	.570	.555	.003960064160033

a. Predictors: (Constant), SMSP\_d

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

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

d. Dependent Variable: AvgPL\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	77.207	.000 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.003	90			
2	Regression	.002	2	.001	51.921	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.003	90			

3	Regression	.002	3	.001	38.444	.000 <sup>d</sup>
	Residual	.001	87	.000		
	Total	.003	90			

- a. Dependent Variable: AvgPL\_d
- b. Predictors: (Constant), SMSP\_d
- c. Predictors: (Constant), SMSP\_d, PL\_TpinN
- d. Predictors: (Constant), SMSP\_d, PL\_TpinN, PL\_TSpinN

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.010	.000		22.495	.000
	SMSP_d	.053	.006	.682	8.787	.000
2	(Constant)	.006	.001		5.017	.000
	SMSP_d	.052	.006	.666	9.207	.000
	PL_TpinN	.396	.103	.278	3.838	.000
3	(Constant)	.007	.001		5.595	.000
	SMSP_d	.052	.005	.674	9.565	.000
	PL_TpinN	.696	.160	.488	4.351	.000
	PL_TSpinN	-.368	.153	-.271	-2.411	.018

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.997	1.003
	PL_TpinN	.997	1.003
3	(Constant)		
	SMSP_d	.994	1.006
	PL_TpinN	.393	2.543
	PL_TSpinN	.392	2.550

a. Dependent Variable: AvgPL\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	.278 <sup>b</sup>	3.838	.000	.379	.997	1.003
	PL_TSpinN	.109 <sup>b</sup>	1.415	.161	.149	.994	1.006
	S_con	.120 <sup>b</sup>	1.557	.123	.164	.999	1.001

	R_con	.145 <sup>b</sup>	1.898	.061	.198	1.000	1.000
2	PL_TSpinN	-.271 <sup>c</sup>	-2.411	.018	-.250	.392	2.550
	S_con	.097 <sup>c</sup>	1.348	.181	.143	.992	1.008
	R_con	.099 <sup>c</sup>	1.360	.177	.144	.969	1.032
3	S_con	.106 <sup>d</sup>	1.512	.134	.161	.990	1.010
	R_con	.113 <sup>d</sup>	1.595	.114	.170	.963	1.038

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.997
	PL_TSpinN	.994
	S_con	.999
	R_con	1.000
2	PL_TSpinN	.392
	S_con	.990
	R_con	.966
3	S_con	.391
	R_con	.390

a. Dependent Variable: AvgPL\_d

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

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	PL_TpinN
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	1.980	1.000	.03	.02	.03
	2	.955	1.440	.00	.98	.00
	3	.064	5.560	.97	.00	.97
3	1	2.928	1.000	.01	.01	.01
	2	.964	1.743	.00	.99	.00
	3	.080	6.061	.98	.00	.08
	4	.028	10.139	.01	.00	.91

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

Model	Dimension	Variance Proportions
		PL_TSpinN
1	1	
	2	
2	1	
	2	

	3	
3	1	.01
	2	.00
	3	.13
	4	.86

a. Dependent Variable: AvgPL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00548149226 2334	.04266853258 0137	.01098901098 9011	.00448284842 7188
Std. Predicted Value	-1.229	7.067	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	.00424066185 9512	.05947471410 0361	.01109452947 1540	.00580218805 6394
Residual	- .00531467003 7478	.02128692530 0956	.00000000000 0000	.00389350371 9427
Std. Residual	-1.342	5.375	.000	.983
Stud. Residual	-2.570	5.607	-.006	1.047
Deleted Residual	- .02160151861 6080	.02316421829 1640	- .00010551848 2529	.00475236531 0902

Stud. Deleted Residual	-2.658	6.977	.012	1.142
Mahal. Distance	.026	69.032	2.967	8.432
Cook's Distance	.000	5.787	.085	.612
Centered Leverage Value	.000	.767	.033	.094

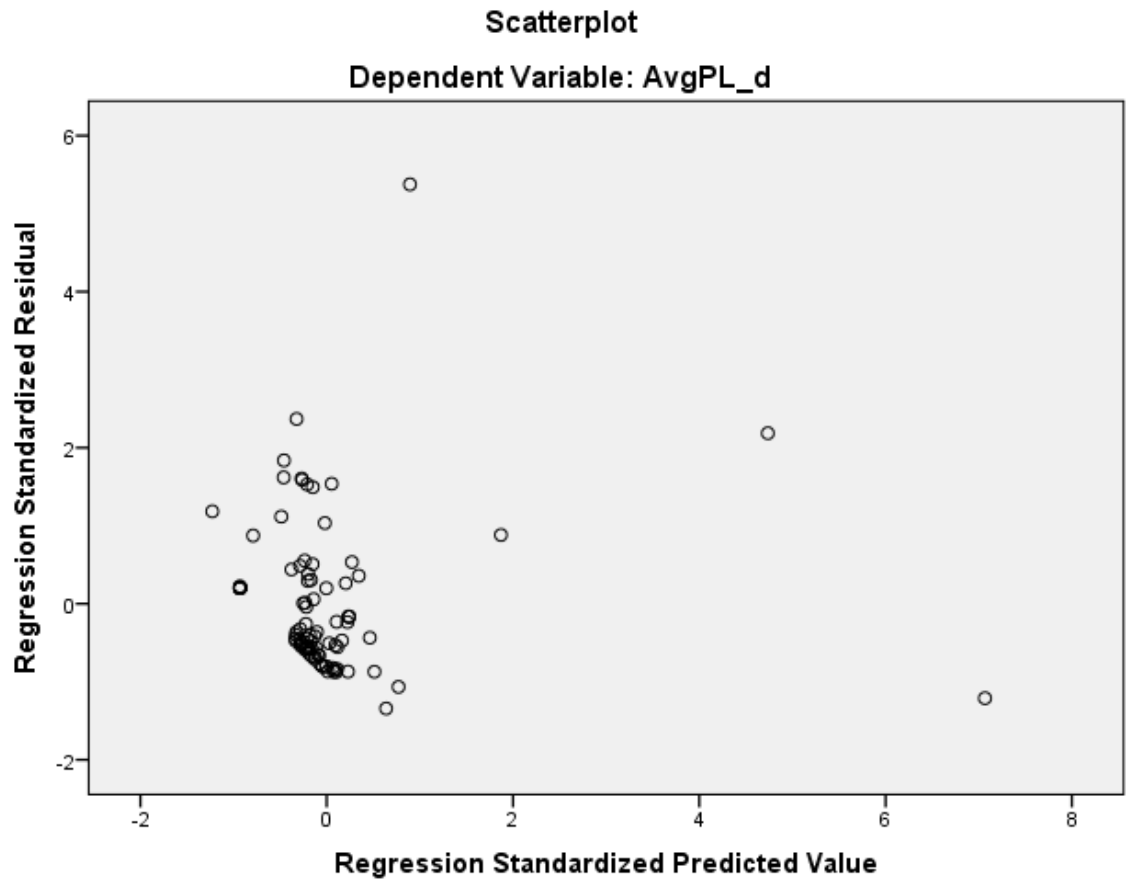
**Residuals Statistics<sup>a</sup>**

	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

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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_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time		00:00:00.22
	Elapsed Time		00:00:00.24
	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	SMSP_d		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	PL_TSpinN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

5	S_con	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: AvgGL\_d

**Model Summary<sup>f</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.509 <sup>a</sup>	.259	.251	.00245195994 2763
2	.622 <sup>b</sup>	.387	.373	.00224337102 6924
3	.671 <sup>c</sup>	.451	.432	.00213517732 6641
4	.691 <sup>d</sup>	.478	.453	.00209457245 2556
5	.709 <sup>e</sup>	.503	.474	.00205500460 4474

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, R\_con

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

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

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

f. Dependent Variable: AvgGL\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	31.148	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	27.764	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.001	90			
3	Regression	.000	3	.000	23.814	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.001	90			
4	Regression	.000	4	.000	19.661	.000 <sup>e</sup>
	Residual	.000	86	.000		
	Total	.001	90			
5	Regression	.000	5	.000	17.209	.000 <sup>f</sup>
	Residual	.000	85	.000		

Total	.001	90			
-------	------	----	--	--	--

- a. Dependent Variable: AvgGL\_d
- b. Predictors: (Constant), SMSP\_d
- c. Predictors: (Constant), SMSP\_d, R\_con
- d. Predictors: (Constant), SMSP\_d, R\_con, PL\_TpinN
- e. Predictors: (Constant), SMSP\_d, R\_con, PL\_TpinN, PL\_TSpinN
- f. Predictors: (Constant), SMSP\_d, R\_con, PL\_TpinN, PL\_TSpinN, S\_con

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		41.521	.000
	SMSP_d	.019	.003	.509	5.581	.000
2	(Constant)	.009	.000		21.985	.000
	SMSP_d	.019	.003	.507	6.072	.000
	R_con	.136	.032	.357	4.280	.000
3	(Constant)	.008	.001		11.177	.000
	SMSP_d	.018	.003	.493	6.190	.000
	R_con	.119	.031	.312	3.865	.000
	PL_TpinN	.175	.055	.257	3.185	.002

4	(Constant)	.008	.001		11.579	.000
	SMSP_d	.018	.003	.501	6.408	.000
	R_con	.124	.030	.325	4.090	.000
	PL_TpinN	.312	.085	.459	3.687	.000
	PL_TSpinN	-.170	.081	-.262	-2.099	.039
5	(Constant)	.004	.002		1.841	.069
	SMSP_d	.017	.003	.462	5.843	.000
	R_con	.666	.262	1.748	2.543	.013
	PL_TpinN	.254	.088	.373	2.889	.005
	PL_TSpinN	-.209	.082	-.322	-2.558	.012
	S_con	-.073	.035	-1.413	-2.084	.040

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	1.000	1.000
	R_con	1.000	1.000
3	(Constant)		
	SMSP_d	.997	1.003
	R_con	.969	1.032



	PL_TpinN	.966	1.035
4	(Constant)		
	SMSP_d	.994	1.006
	R_con	.963	1.038
	PL_TpinN	.392	2.550
	PL_TSpinN	.390	2.565
5	(Constant)		
	SMSP_d	.937	1.067
	R_con	.012	80.745
	PL_TpinN	.352	2.843
	PL_TSpinN	.370	2.705
	S_con	.013	78.574

a. Dependent Variable: AvgGL\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	.313 <sup>b</sup>	3.650	.000	.363	.997	1.003
	PL_TSpinN	.156 <sup>b</sup>	1.721	.089	.180	.994	1.006
	S_con	.317 <sup>b</sup>	3.708	.000	.368	.999	1.001
	R_con	.357 <sup>b</sup>	4.280	.000	.415	1.000	1.000

2	PL_TpinN	.257 <sup>c</sup>	3.185	.002	.323	.966	1.035
	PL_TSpinN	.093 <sup>c</sup>	1.089	.279	.116	.960	1.041
	S_con	-1.688 <sup>c</sup>	-3.138	.002	-.319	.022	45.710
3	PL_TSpinN	-.262 <sup>d</sup>	-2.099	.039	-.221	.390	2.565
	S_con	-1.018 <sup>d</sup>	-1.495	.139	-.159	.013	74.499
4	S_con	-1.413 <sup>e</sup>	-2.084	.040	-.220	.013	78.574

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.997
	PL_TSpinN	.994
	S_con	.999
	R_con	1.000
2	PL_TpinN	.966
	PL_TSpinN	.960
	S_con	.022
3	PL_TSpinN	.390
	S_con	.013
4	S_con	.012

a. Dependent Variable: AvgGL\_d

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

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

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	R_con
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	1.870	1.000	.08	.02	.08
	2	.960	1.396	.01	.97	.01
	3	.170	3.316	.91	.00	.91
3	1	2.752	1.000	.01	.01	.03
	2	.967	1.687	.00	.99	.00
	3	.217	3.559	.06	.00	.95
	4	.063	6.594	.93	.00	.02
4	1	3.679	1.000	.01	.00	.02
	2	.969	1.948	.00	.99	.00
	3	.247	3.863	.01	.00	.93
	4	.077	6.919	.97	.00	.05
	5	.028	11.368	.01	.00	.00
5	1	3.831	1.000	.00	.00	.00

2	1.112	1.856	.00	.16	.00
3	.938	2.021	.00	.78	.00
4	.088	6.580	.06	.00	.00
5	.028	11.600	.00	.00	.00
6	.002	40.485	.94	.06	1.00

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

Model	Dimension	Variance Proportions		
		PL_TpinN	PL_TSpinN	S_con
1	1			
	2			
2	1			
	2			
	3			
3	1	.01		
	2	.00		
	3	.11		
	4	.88		
4	1	.00	.00	
	2	.00	.00	
	3	.02	.02	
	4	.06	.12	
	5	.91	.86	

5	1	.00	.00	.00
	2	.00	.00	.01
	3	.00	.00	.00
	4	.08	.14	.00
	5	.82	.81	.00
	6	.10	.05	.99

a. Dependent Variable: AvgGL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00783880520 6120	.02258827723 5627	.01098901098 9011	.00200937027 5543
Std. Predicted Value	-1.568	5.773	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00681811245 1583	.03035852685 5707	.01102003174 3824	.00255149000 8737
Residual	- .00212282920 2563	.00836882460 8624	.00000000000 0000	.00199710549 8729
Std. Residual	-1.033	4.072	.000	.972
Stud. Residual	-2.230	4.288	-.002	1.034

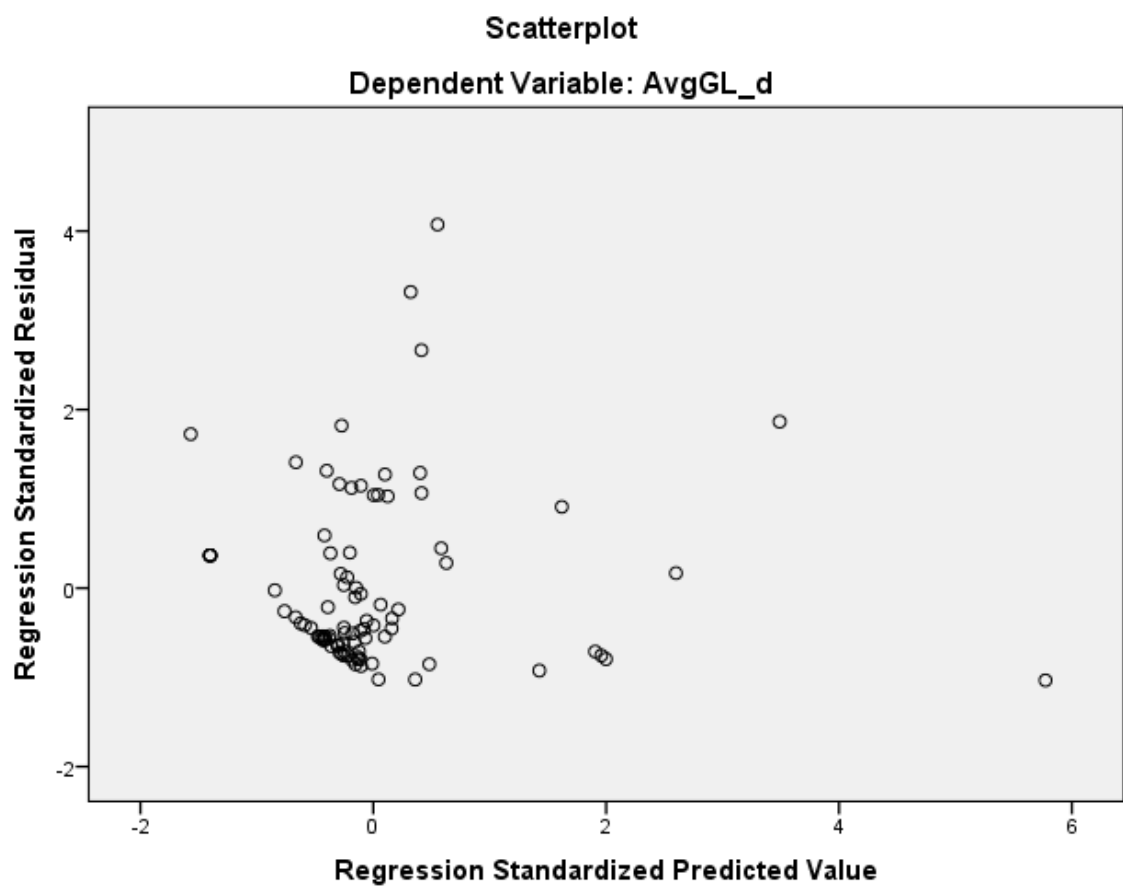
Deleted Residual	- .00989308021 9626	.00927650835 3651	- .00003102075 4813	.00240915132 4434
Stud. Deleted Residual	-2.285	4.815	.010	1.075
Mahal. Distance	.104	70.324	4.945	11.270
Cook's Distance	.000	3.034	.050	.321
Centered Leverage Value	.001	.781	.055	.125

**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 GD_d
/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/SAVE COOK.

```

## Regression

### Notes

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Comments		
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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 GD_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.18
	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	SMSP_d		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	.462 <sup>a</sup>	.214	.205	.00440112170 1733

2	.551 <sup>b</sup>	.303	.287	.00416589429 7377
---	-------------------	------	------	----------------------

a. Predictors: (Constant), PL\_TpinN

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

c. Dependent Variable: GD\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	23.902	.000 <sup>b</sup>
	Residual	.002	88	.000		
	Total	.002	89			
2	Regression	.001	2	.000	18.948	.000 <sup>c</sup>
	Residual	.002	87	.000		
	Total	.002	89			

a. Dependent Variable: GD\_d

b. Predictors: (Constant), PL\_TpinN

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.005	.001		3.681	.000
	PL_TpinN	.545	.112	.462	4.889	.000
2	(Constant)	.005	.001		4.093	.000
	PL_TpinN	.507	.106	.430	4.775	.000
	SMSP_d	.040	.012	.301	3.349	.001

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpinN	1.000	1.000
2	(Constant)		
	PL_TpinN	.988	1.012
	SMSP_d	.988	1.012

a. Dependent Variable: GD\_d

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

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

					Correlation	Tolerance	VIF
1	PL_TSpinN	-.028 <sup>b</sup>	-.185	.853	-.020	.388	2.575
	S_con	.001 <sup>b</sup>	.015	.988	.002	.993	1.007
	R_con	.016 <sup>b</sup>	.169	.866	.018	.969	1.032
	SMSP_d	.301 <sup>b</sup>	3.349	.001	.338	.988	1.012
2	PL_TSpinN	.051 <sup>c</sup>	.352	.726	.038	.378	2.645
	S_con	.010 <sup>c</sup>	.114	.910	.012	.992	1.008
	R_con	.028 <sup>c</sup>	.305	.761	.033	.967	1.034

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpinN	.388
	S_con	.993
	R_con	.969
	SMSP_d	.988
2	PL_TSpinN	.374
	S_con	.981
	R_con	.957

a. Dependent Variable: GD\_d

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpinN	SMSP_d
1	1	1.935	1.000	.03	.03	
	2	.065	5.465	.97	.97	
2	1	1.965	1.000	.03	.03	.02
	2	.970	1.423	.00	.00	.98
	3	.064	5.530	.97	.97	.01

a. Dependent Variable: GD\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00508518796 4141	.02690582908 6900	.01081215744 8929	.00271837074 5947
Std. Predicted Value	-2.107	5.920	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00470598228 2758	.01662762090 5638	.01062914331 0262	.00212001505 9176

Residual	- .00724051985 8897	.01734662055 9692	.00000000000 0000	.00411882053 4281
Std. Residual	-1.738	4.164	.000	.989
Stud. Residual	-1.751	4.251	.000	1.005
Deleted Residual	- .00734524335 7122	.01808174885 8094	.00000218636 1729	.00423009796 9430
Stud. Deleted Residual	-1.772	4.749	.007	1.035
Mahal. Distance	.011	88.011	1.978	9.408
Cook's Distance	.000	.255	.007	.027
Centered Leverage Value	.000	.989	.022	.106

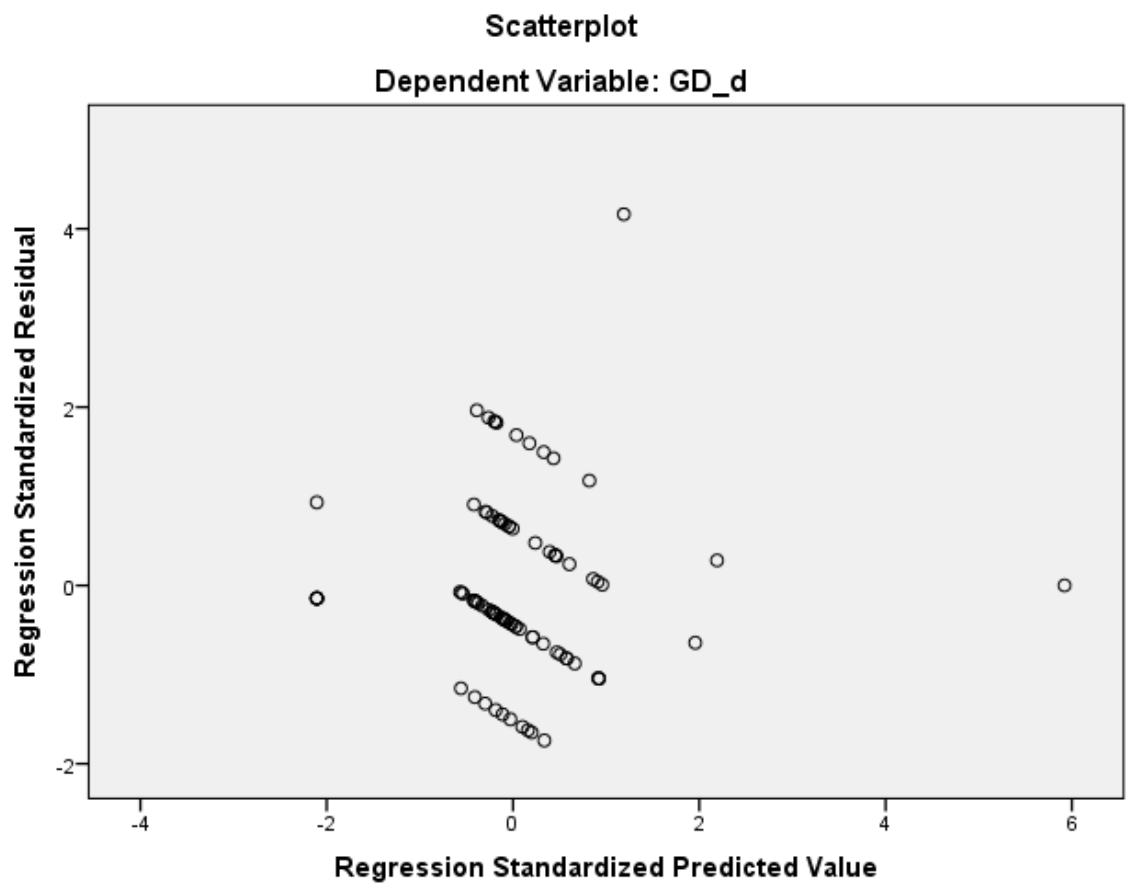
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89
Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90

Cook's Distance	89
Centered Leverage Value	90

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

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Comments		
Input	Active Dataset	DataSet1

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	Weight	<none>
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	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 Tpaths_d</p> <p>/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.17
	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	SMSP_d		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: Tpaths\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.463 <sup>a</sup>	.214	.205	.00166773468 0237
2	.532 <sup>b</sup>	.283	.267	.00160178604 1748

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, R\_con

c. Dependent Variable: Tpaths\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	23.994	.000 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			
2	Regression	.000	2	.000	17.203	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.000	89			

a. Dependent Variable: Tpaths\_d

b. Predictors: (Constant), SMSP\_d

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		61.183	.000
	SMSP_d	.023	.005	.463	4.898	.000
2	(Constant)	.010	.000		33.429	.000
	SMSP_d	.023	.005	.468	5.151	.000
	R_con	.066	.023	.263	2.897	.005

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	1.000	1.000
	R_con	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_TpinN	.098 <sup>b</sup>	1.032	.305	.110	.988	1.012
	PL_TSpinN	-.031 <sup>b</sup>	-.332	.741	-.036	1.000	1.000
	S_con	.246 <sup>b</sup>	2.688	.009	.277	1.000	1.000
	R_con	.263 <sup>b</sup>	2.897	.005	.297	1.000	1.000
2	PL_TpinN	.052 <sup>c</sup>	.561	.576	.060	.957	1.045
	PL_TSpinN	-.083 <sup>c</sup>	-.894	.374	-.096	.966	1.035
	S_con	-.676 <sup>c</sup>	-1.096	.276	-.117	.022	46.261

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.988
	PL_TSpinN	1.000
	S_con	1.000
	R_con	1.000
2	PL_TpinN	.957

PL_TSpinN	.966
S_con	.022

- a. Dependent Variable: Tpaths\_d
- b. Predictors in the Model: (Constant), SMSP\_d
- c. Predictors in the Model: (Constant), SMSP\_d, R\_con

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	R_con
1	1	1.105	1.000	.45	.45	
	2	.895	1.112	.55	.55	
2	1	1.848	1.000	.08	.01	.08
	2	.981	1.373	.00	.98	.00
	3	.172	3.282	.91	.00	.91

- a. Dependent Variable: Tpaths\_d

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

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

Predicted Value	.01052519213 4082	.01903090067 2078	.01090720654 7116	.00099592556 6914
Std. Predicted Value	-.384	8.157	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.01043451949 9540	.01513801235 7056	.01082351935 0622	.00055008020 8621
Residual	- .00208592624 4035	.00589034566 6558	.00000000000 0000	.00158368618 3404
Std. Residual	-1.302	3.677	.000	.989
Stud. Residual	-1.310	3.706	-.002	1.002
Deleted Residual	- .00211228383 7050	.00598101876 6761	- .00000759026 1979	.00161720485 3607
Stud. Deleted Residual	-1.316	4.015	.008	1.034
Mahal. Distance	.011	88.011	1.978	11.091
Cook's Distance	.000	.070	.005	.012
Centered Leverage Value	.000	.989	.022	.125

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

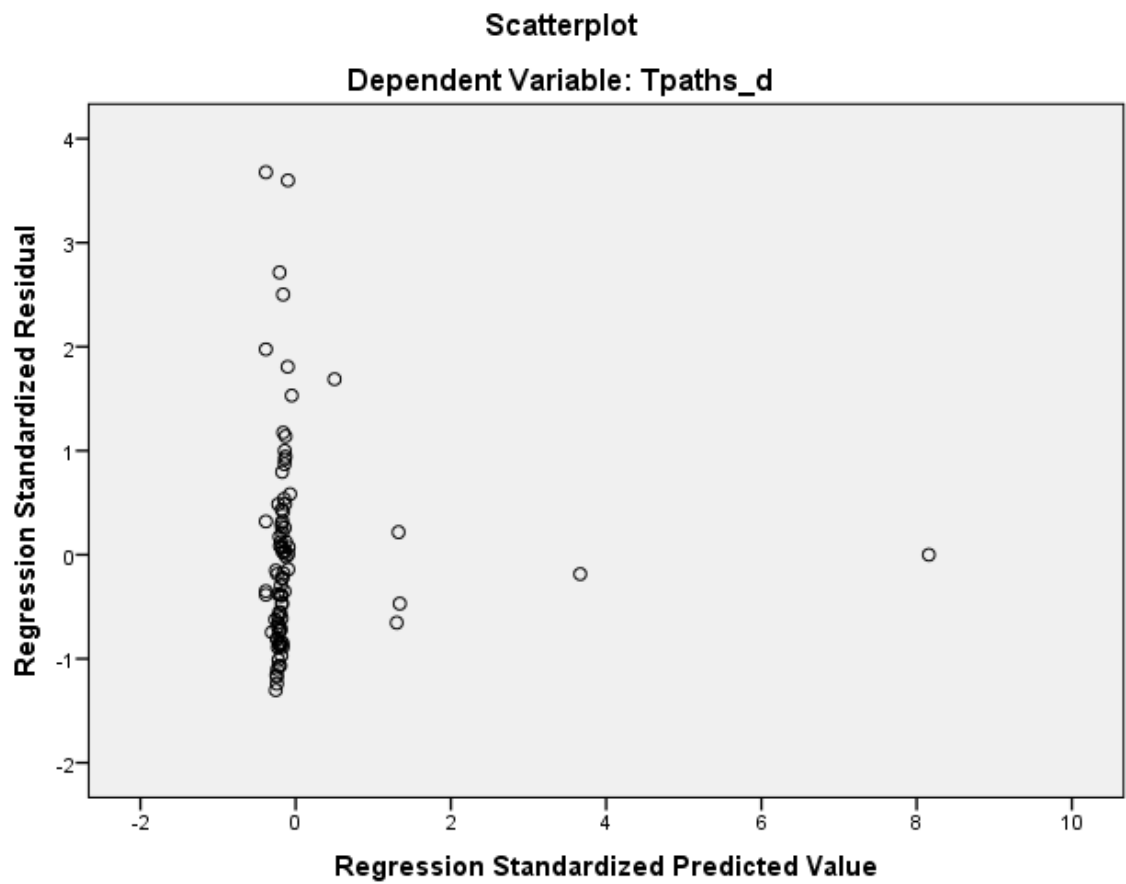
	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89



Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90
Cook's Distance	89
Centered Leverage Value	90

a. Dependent Variable: Tpaths\_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

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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 TSpaths_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.18
	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	R_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
---	-------	--	---

a. Dependent Variable: TSpats\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.316 <sup>a</sup>	.100	.089	.00147697752 1121

a. Predictors: (Constant), R\_con

b. Dependent Variable: TSpats\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	9.739	.002 <sup>b</sup>
	Residual	.000	88	.000		

Total	.000	89			
-------	------	----	--	--	--

a. Dependent Variable: TSpaths\_d

b. Predictors: (Constant), R\_con

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.010	.000		36.855	.000
R_con	.065	.021	.316	3.121	.002

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

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
R_con	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_TpinN	-.011 <sup>b</sup>	-.106	.916	-.011	.969	1.032
	PL_TSpinN	-.143 <sup>b</sup>	-1.398	.166	-.148	.966	1.035
	S_con	-.472 <sup>b</sup>	-.684	.496	-.073	.022	46.249
	SMSP_d	.179 <sup>b</sup>	1.787	.077	.188	1.000	1.000

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.969
	PL_TSpinN	.966
	S_con	.022
	SMSP_d	1.000

a. Dependent Variable: TSpats\_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	1.828	1.000	.09	.09
	2	.172	3.260	.91	.91

a. Dependent Variable: TSpaths\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01066123880 4460	.01466547138 9890	.01094900135 6977	.00048857445 3445
Std. Predicted Value	-.589	7.607	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.01056586019 6948	.01554714608 9375	.01095889404 9037	.00056834520 2277
Residual	- .00195747823 4544	.00625942461 1926	.00000000000 0000	.00146865645 4788
Std. Residual	-1.325	4.238	.000	.994
Stud. Residual	-1.334	4.270	-.002	1.002
Deleted Residual	- .00198193313 5539	.00635480321 9438	- .00000989269 2060	.00149525233 7886
Stud. Deleted Residual	-1.340	4.769	.010	1.052
Mahal. Distance	.000	57.863	.989	6.240
Cook's Distance	.000	.269	.010	.033



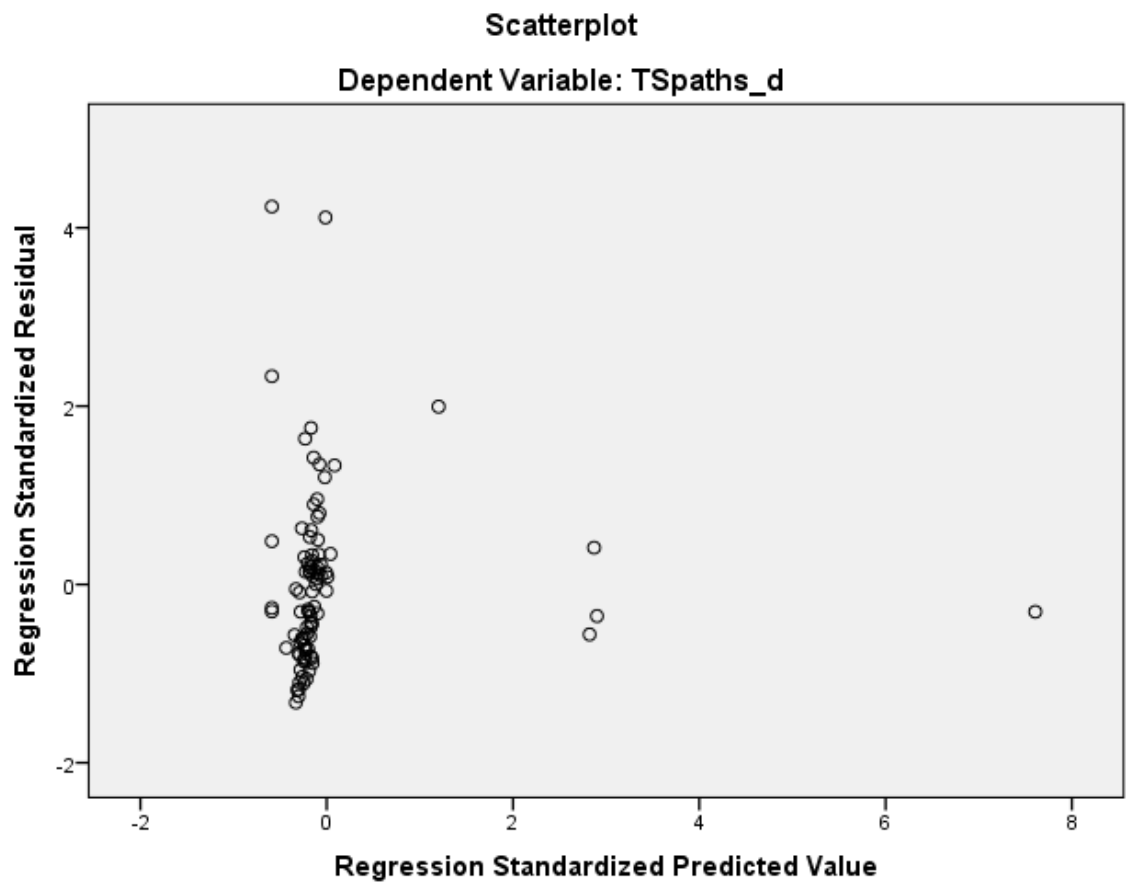
Centered Leverage Value	.000	.650	.011	.070
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#### Residuals Statistics<sup>a</sup>

	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: 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	00:00:00.16
	Elapsed Time	00:00:00.18
	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	SMSP_d		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: AvgPL\_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	.00415712660 1770
2	.680 <sup>b</sup>	.463	.450	.00388351264 4395

a. Predictors: (Constant), SMSP\_d

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

c. Dependent Variable: AvgPL\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	53.316	.000 <sup>b</sup>
	Residual	.002	88	.000		
	Total	.002	89			
2	Regression	.001	2	.001	37.465	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), SMSP\_d

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.010	.000		23.490	.000

	SMSP_d	.086	.012	.614	7.302	.000
2	(Constant)	.006	.001		5.459	.000
	SMSP_d	.081	.011	.583	7.371	.000
	PL_TpinN	.368	.099	.294	3.720	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.988	1.012
	PL_TpinN	.988	1.012

a. Dependent Variable: AvgPL\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	.294 <sup>b</sup>	3.720	.000	.370	.988	1.012
	PL_TSpinN	.141 <sup>b</sup>	1.698	.093	.179	1.000	1.000
	S_con	.139 <sup>b</sup>	1.664	.100	.176	1.000	1.000

	R_con	.172 <sup>b</sup>	2.083	.040	.218	1.000	1.000
2	PL_TSpinN	-.236 <sup>c</sup>	-1.872	.065	-.198	.378	2.645
	S_con	.115 <sup>c</sup>	1.462	.147	.156	.992	1.008
	R_con	.124 <sup>c</sup>	1.559	.123	.166	.967	1.034

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.988
	PL_TSpinN	1.000
	S_con	1.000
	R_con	1.000
2	PL_TSpinN	.374
	S_con	.981
	R_con	.957

a. Dependent Variable: AvgPL\_d

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

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

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

Model	Dimension	Eigenvalue	Condition	Variance Proportions
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			Index	(Constant)	SMSP_d	PL_TpinN
1	1	1.105	1.000	.45	.45	
	2	.895	1.112	.55	.55	
2	1	1.965	1.000	.03	.02	.03
	2	.970	1.423	.00	.98	.00
	3	.064	5.530	.97	.01	.97

a. Dependent Variable: AvgPL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00632374174 8929	.04087571799 7551	.01069029783 5930	.00356336191 5395
Std. Predicted Value	-1.225	8.471	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00618917960 6736	.01490276213 7353	.01033219269 8115	.00154673703 3895
Residual	- .00580865610 3909	.02345511317 2531	.00000000000 0000	.00383962973 6873
Std. Residual	-1.496	6.040	.000	.989
Stud. Residual	-1.566	6.166	.002	1.011

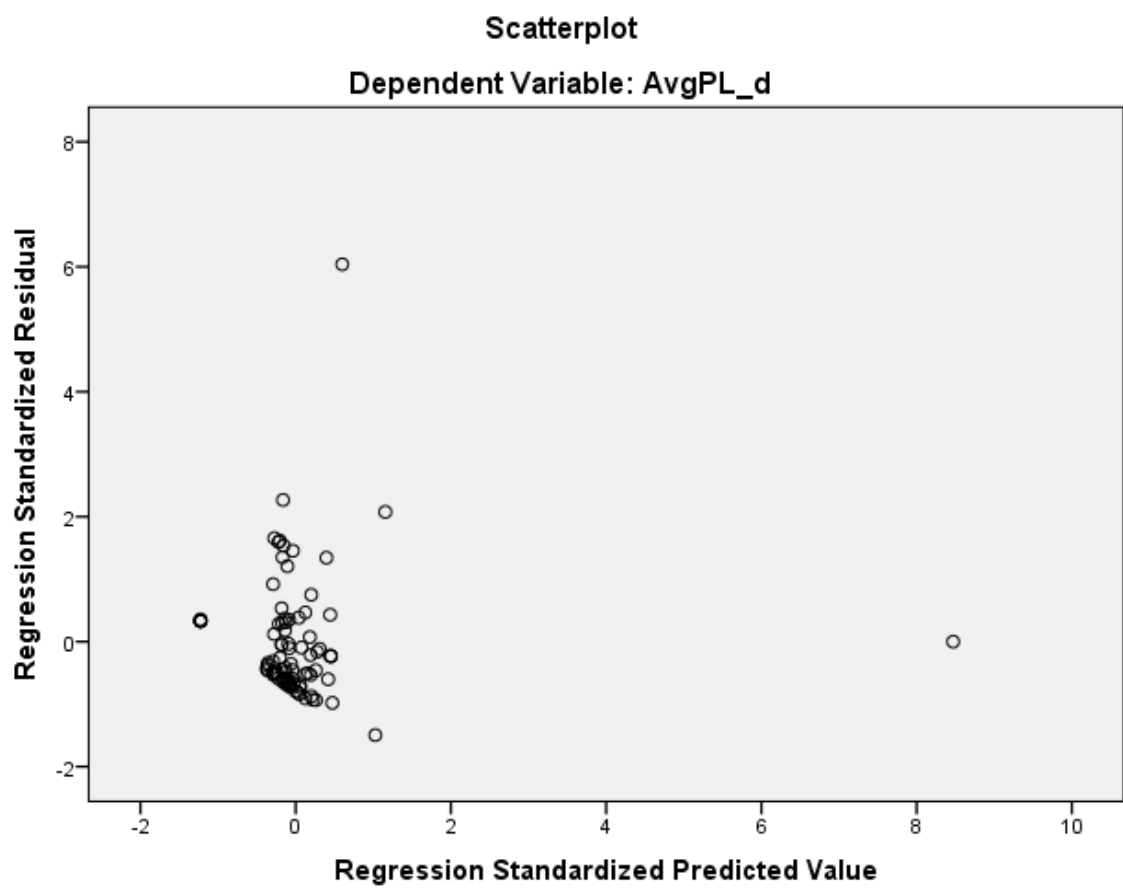
Deleted Residual	- .00636675814 1667	.02444911189 3773	.00001894310 6799	.00399387081 7920
Stud. Deleted Residual	-1.579	8.171	.028	1.164
Mahal. Distance	.011	88.011	1.978	9.408
Cook's Distance	.000	.537	.012	.060
Centered Leverage Value	.000	.989	.022	.106

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

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89
Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90
Cook's Distance	89
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 AvgGL_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 AvgGL_d  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.22
	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
1	SMSP_d		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	S_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgGL\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438 <sup>a</sup>	.192	.183	.00240806658 3134
2	.585 <sup>b</sup>	.342	.327	.00218592970 7165
3	.653 <sup>c</sup>	.427	.407	.00205140920 9958

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, R\_con

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

d. Dependent Variable: AvgGL\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	20.909	.000 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.001	89			
2	Regression	.000	2	.000	22.584	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.001	89			

3	Regression	.000	3	.000	21.357	.000 <sup>d</sup>
	Residual	.000	86	.000		
	Total	.001	89			

a. Dependent Variable: AvgGL\_d

b. Predictors: (Constant), SMSP\_d

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

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		42.157	.000
	SMSP_d	.031	.007	.438	4.573	.000
2	(Constant)	.009	.000		22.439	.000
	SMSP_d	.032	.006	.445	5.116	.000
	R_con	.138	.031	.387	4.449	.000
3	(Constant)	.003	.002		1.394	.167
	SMSP_d	.031	.006	.440	5.393	.000
	R_con	.838	.198	2.351	4.234	.000
	S_con	-.096	.027	-1.985	-3.575	.001



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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	1.000	1.000
	R_con	1.000	1.000
3	(Constant)		
	SMSP_d	.999	1.001
	R_con	.022	46.258
	S_con	.022	46.261

a. Dependent Variable: AvgGL\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	.319 <sup>b</sup>	3.515	.001	.353	.988	1.012
	PL_TSpinN	.179 <sup>b</sup>	1.892	.062	.199	1.000	1.000
	S_con	.340 <sup>b</sup>	3.809	.000	.378	1.000	1.000

	R_con	.387 <sup>b</sup>	4.449	.000	.431	1.000	1.000
2	PL_TpinN	.257 <sup>c</sup>	3.025	.003	.310	.957	1.045
	PL_TSpinN	.111 <sup>c</sup>	1.261	.211	.135	.966	1.035
	S_con	-1.985 <sup>c</sup>	-3.575	.001	-.360	.022	46.261
3	PL_TpinN	.112 <sup>d</sup>	1.036	.303	.112	.565	1.768
	PL_TSpinN	-.099 <sup>d</sup>	-.958	.341	-.103	.629	1.591

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.988
	PL_TSpinN	1.000
	S_con	1.000
	R_con	1.000
2	PL_TpinN	.957
	PL_TSpinN	.966
	S_con	.022
3	PL_TpinN	.012
	PL_TSpinN	.014

a. Dependent Variable: AvgGL\_d

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

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	R_con
1	1	1.105	1.000	.45	.45	
	2	.895	1.112	.55	.55	
2	1	1.848	1.000	.08	.01	.08
	2	.981	1.373	.00	.98	.00
	3	.172	3.282	.91	.00	.91
3	1	2.203	1.000	.00	.00	.00
	2	1.013	1.475	.00	.87	.00
	3	.781	1.679	.01	.12	.00
	4	.004	24.381	.99	.00	1.00

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

Model	Dimension	Variance Proportions
		S_con
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.00
	3	.01
	4	.98

a. Dependent Variable: AvgGL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00813802145 4215	.02183355949 8191	.01088371725 2233	.00174055145 0169
Std. Predicted Value	-1.577	6.291	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00805968698 1142	.01556072477 2513	.01073863357 0592	.00125675501 8403
Residual	- .00247145211 3241	.01009031292 0511	.00000000000 0000	.00201653852 4405
Std. Residual	-1.205	4.919	.000	.983
Stud. Residual	-1.218	4.949	.003	1.001
Deleted Residual	- .00252640713 0063	.01021530479 1927	.00002205174 4224	.00209428732 0483

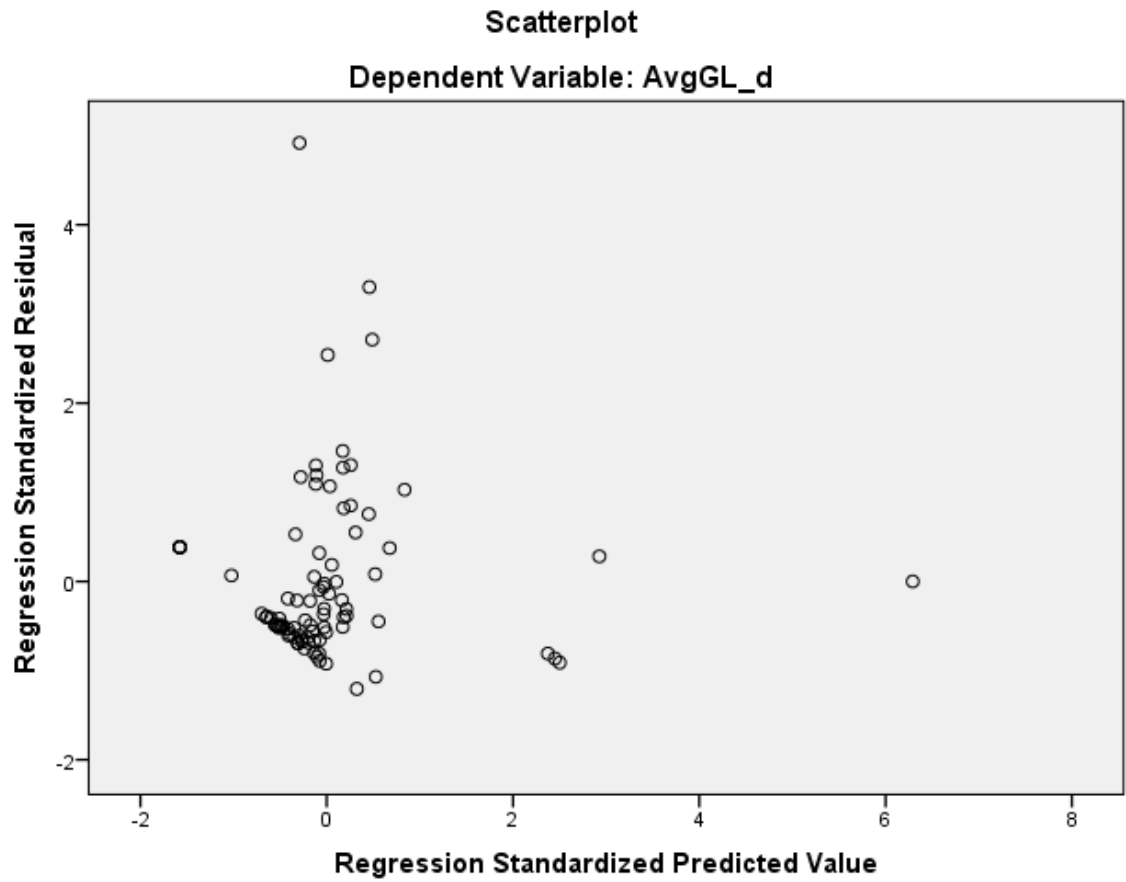
Stud. Deleted Residual	-1.222	5.818	.019	1.067
Mahal. Distance	.052	88.011	2.967	11.830
Cook's Distance	.000	.352	.010	.039
Centered Leverage Value	.001	.989	.033	.133

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

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89
Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90
Cook's Distance	89
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 ECin

/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 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	00:00:00.18
	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).
2	S_con		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECin

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.320 <sup>a</sup>	.102	.092	.00403879745 5850
2	.438 <sup>b</sup>	.192	.173	.00385493087 1408

a. Predictors: (Constant), R\_con

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

c. Dependent Variable: ECin

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	10.164	.002 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.000	2	.000	10.425	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

a. Dependent Variable: ECin

b. Predictors: (Constant), R\_con

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

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

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

		B	Std. Error	Beta		
1	(Constant)	.013	.001		17.135	.000
	R_con	-.183	.057	-.320	-3.188	.002
2	(Constant)	.023	.003		6.811	.000
	R_con	-1.290	.360	-2.262	-3.584	.001
	S_con	.152	.049	1.965	3.113	.002

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_con	1.000	1.000
2	(Constant)		
	R_con	.023	43.359
	S_con	.023	43.359

a. Dependent Variable: ECin

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	-.190 <sup>b</sup>	-1.888	.062	-.197	.969	1.032

	PL_TSpinN	-.269 <sup>b</sup>	-2.722	.008	-.279	.966	1.035
	S_con	1.965 <sup>b</sup>	3.113	.002	.315	.023	43.359
	SMSP_d	-.171 <sup>b</sup>	-1.723	.088	-.181	1.000	1.000
2	PL_TpinN	-.004 <sup>c</sup>	-.036	.972	-.004	.600	1.668
	PL_TSpinN	-.137 <sup>c</sup>	-1.130	.262	-.120	.626	1.597
	SMSP_d	-.109 <sup>c</sup>	-1.110	.270	-.118	.949	1.054

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.969
	PL_TSpinN	.966
	S_con	.023
	SMSP_d	1.000
2	PL_TpinN	.014
	PL_TSpinN	.015
	SMSP_d	.022

a. Dependent Variable: ECin

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_con	S_con
1	1	1.830	1.000	.09	.09	
	2	.170	3.277	.91	.91	
2	1	2.191	1.000	.00	.00	.00
	2	.805	1.650	.01	.00	.02
	3	.004	23.655	.99	1.00	.98

a. Dependent Variable: ECin

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00472471211 1056	.01501631923 0199	.01098901098 9011	.00185541681 0478
Std. Predicted Value	-3.376	2.171	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	.00301539478 8235	.02000317350 0299	.01113740157 4372	.00206808642 8923
Residual	- .00839149020 6122	.01029508840 2927	.00000000000 0000	.00381185766 6186
Std. Residual	-2.177	2.671	.000	.989

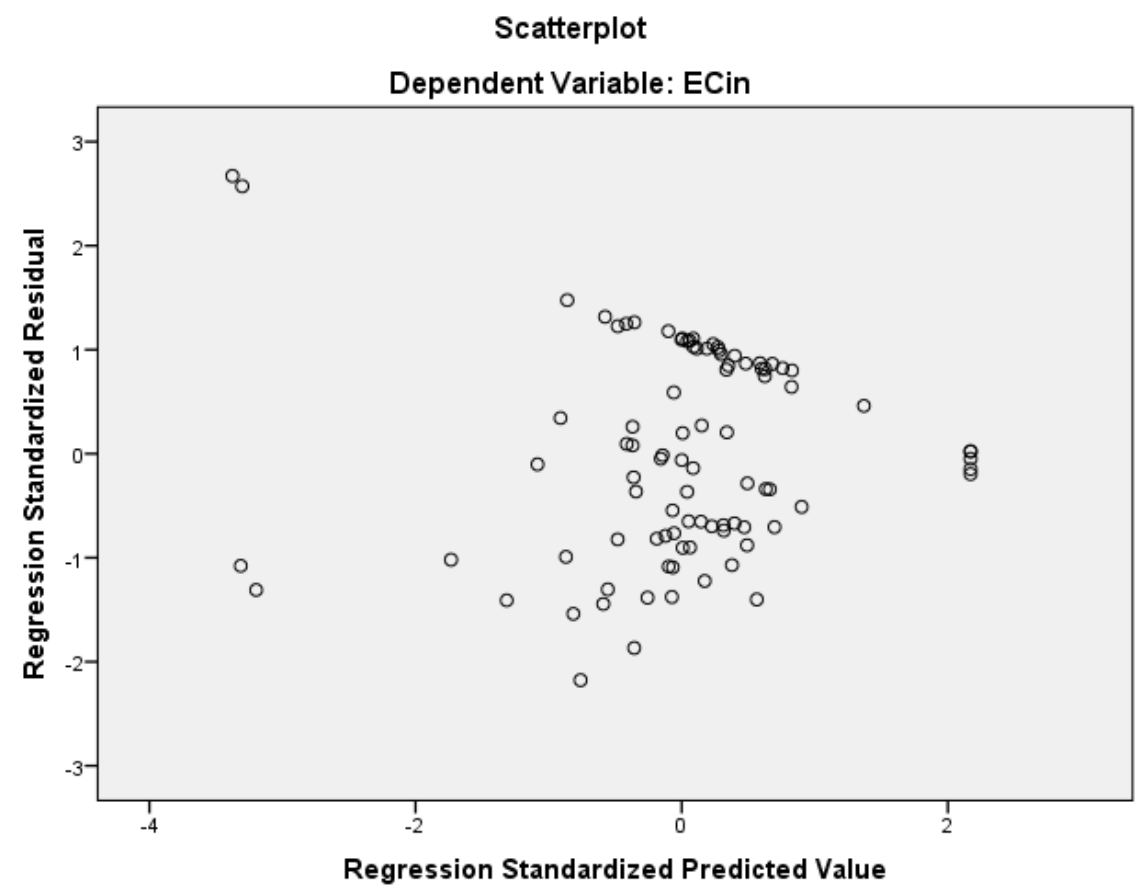
Stud. Residual	-2.325	2.884	-.011	1.033
Deleted Residual	-	-	-	-
	.01931930892	.01200440619	.00014839058	.00444989143
	1695	1409	5361	2621
Stud. Deleted Residual	-2.386	3.013	-.011	1.045
Mahal. Distance	.040	69.647	1.978	7.596
Cook's Distance	.000	6.571	.088	.690
Centered Leverage Value	.000	.774	.022	.084

#### 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		06-JUN-2015 11:50:09
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_EVCinN  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.14
	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	PL_TSpinN		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	.291 <sup>a</sup>	.084	.074	.01250835022 4391

a. Predictors: (Constant), PL\_TSpinN

b. Dependent Variable: PL\_EVCinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	8.204	.005 <sup>b</sup>
	Residual	.014	89	.000		
	Total	.015	90			

a. Dependent Variable: PL\_EVCinN

b. Predictors: (Constant), PL\_TSpinN

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.001	.004		.412	.681
	PL_TSpinN	.866	.302	.291	2.864	.005

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TSpinN	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	PL_TpinN	.049 <sup>b</sup>	.302	.763	.032	.393	2.543
	S_con	.081 <sup>b</sup>	.794	.430	.084	.991	1.009
	R_con	.084 <sup>b</sup>	.811	.420	.086	.966	1.035
	SMSP_d	.173 <sup>b</sup>	1.719	.089	.180	.994	1.006

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.393
	S_con	.991
	R_con	.966
	SMSP_d	.994

a. Dependent Variable: PL\_EVCinN

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	PL_TSpinN
1	1	1.930	1.000	.03	.03
	2	.070	5.258	.97	.97

a. Dependent Variable: PL\_EVCinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00147150794 5098	.02058523520 8273	.01098901098 9011	.00377661715 9158
Std. Predicted Value	-2.520	2.541	.000	1.000
Standard Error of Predicted Value	.001	.004	.002	.001
Adjusted Predicted Value	.00160217378 2885	.02131388150 1555	.01101658704 9230	.00379082686 4634
Residual	- .01572154462 3375	.03337810188 5319	.00000000000 0000	.01243866527 9820
Std. Residual	-1.257	2.668	.000	.994
Stud. Residual	-1.275	2.683	-.001	1.002
Deleted Residual	- .01618169993 1622	.03375119343 4000	- .00002757606 0219	.01263528535 8760

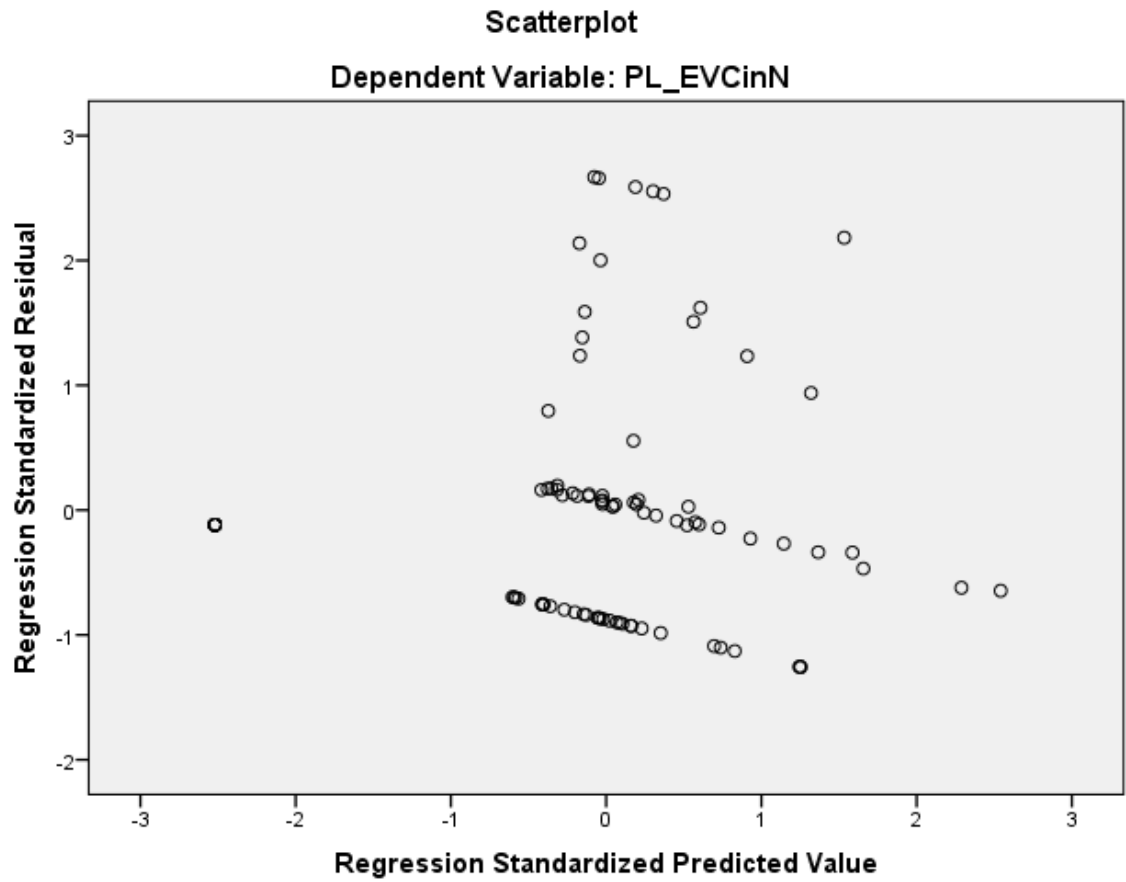
Stud. Deleted Residual	-1.280	2.783	.006	1.020
Mahal. Distance	.000	6.456	.989	1.949
Cook's Distance	.000	.095	.008	.014
Centered Leverage Value	.000	.072	.011	.022

**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 PL_TpinN PL_TSpinN S_con R_con SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		06-JUN-2015 11:50:25
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 EVCin_TpinN  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03
	Memory Required	6160 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	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\_TSpinN

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

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

/SAVE COOK.

## Regression

### Notes

Output Created	06-JUN-2015 11:50:40
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 EVCin_TSpinN  /METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.04
	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 PL\_EVCinN

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

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

/SAVE COOK.

### Regression

# Notes

Output Created		06-JUN-2015 11:51:33
Comments		
Input	Active Dataset	DataSet3
	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_EVCinN
		/METHOD=STEPWISE PL_TpinN PL_TSpinN S_con R_con SMSP_d
		/SCATTERPLOT=(*ZRESID ,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	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	PL_TSpinN		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).

a. Dependent Variable: PL\_EVCinN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.301 <sup>a</sup>	.091	.080	.01224800146 9818
2	.370 <sup>b</sup>	.137	.117	.01200053974 2493

a. Predictors: (Constant), PL\_TSpinN

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

c. Dependent Variable: PL\_EVCinN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	8.790	.004 <sup>b</sup>
	Residual	.013	88	.000		
	Total	.015	89			
2	Regression	.002	2	.001	6.911	.002 <sup>c</sup>
	Residual	.013	87	.000		
	Total	.015	89			

a. Dependent Variable: PL\_EVCinN

b. Predictors: (Constant), PL\_TSpinN

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.001	.004		.298	.766



	PL_TSpinN	.878	.296	.301	2.965	.004
2	(Constant)	.000	.003		.042	.966
	PL_TSpinN	1.014	.297	.348	3.415	.001
	S_con	-.098	.046	-.220	-2.160	.034

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TSpinN	1.000	1.000
2	(Constant)		
	PL_TSpinN	.955	1.047
	S_con	.955	1.047

a. Dependent Variable: PL\_EVCinN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpinN	.061 <sup>b</sup>	.373	.710	.040	.393	2.543
	S_con	-.220 <sup>b</sup>	-2.160	.034	-.226	.955	1.047
	R_con	-.191 <sup>b</sup>	-1.788	.077	-.188	.884	1.132

	SMSP_d	.180 <sup>b</sup>	1.789	.077	.188	.994	1.006
2	PL_TpinN	.088 <sup>c</sup>	.548	.585	.059	.391	2.558
	R_con	.833 <sup>c</sup>	1.585	.117	.168	.035	28.368
	SMSP_d	.171 <sup>c</sup>	1.725	.088	.183	.992	1.008

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpinN	.393
	S_con	.955
	R_con	.884
	SMSP_d	.994
2	PL_TpinN	.391
	R_con	.035
	SMSP_d	.948

a. Dependent Variable: PL\_EVCinN

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

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

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

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

			Index	(Constant)	PL_TSpinN	S_con
1	1	1.930	1.000	.04	.04	
	2	.070	5.236	.96	.96	
2	1	2.040	1.000	.03	.03	.04
	2	.892	1.513	.01	.00	.92
	3	.068	5.470	.96	.97	.03

a. Dependent Variable: PL\_EVCinN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00014380484 9358	.02252054587 0066	.01069902915 8175	.00472938589 8221
Std. Predicted Value	-2.232	2.500	.000	1.000
Standard Error of Predicted Value	.001	.007	.002	.001
Adjusted Predicted Value	.00015682329 8312	.02350295148 7899	.01073034409 0398	.00474188050 7247
Residual	- .01494687236 8455	.03316641971 4689	.00000000000 0000	.01186493607 0260
Std. Residual	-1.246	2.764	.000	.989
Stud. Residual	-1.258	2.780	-.001	.997

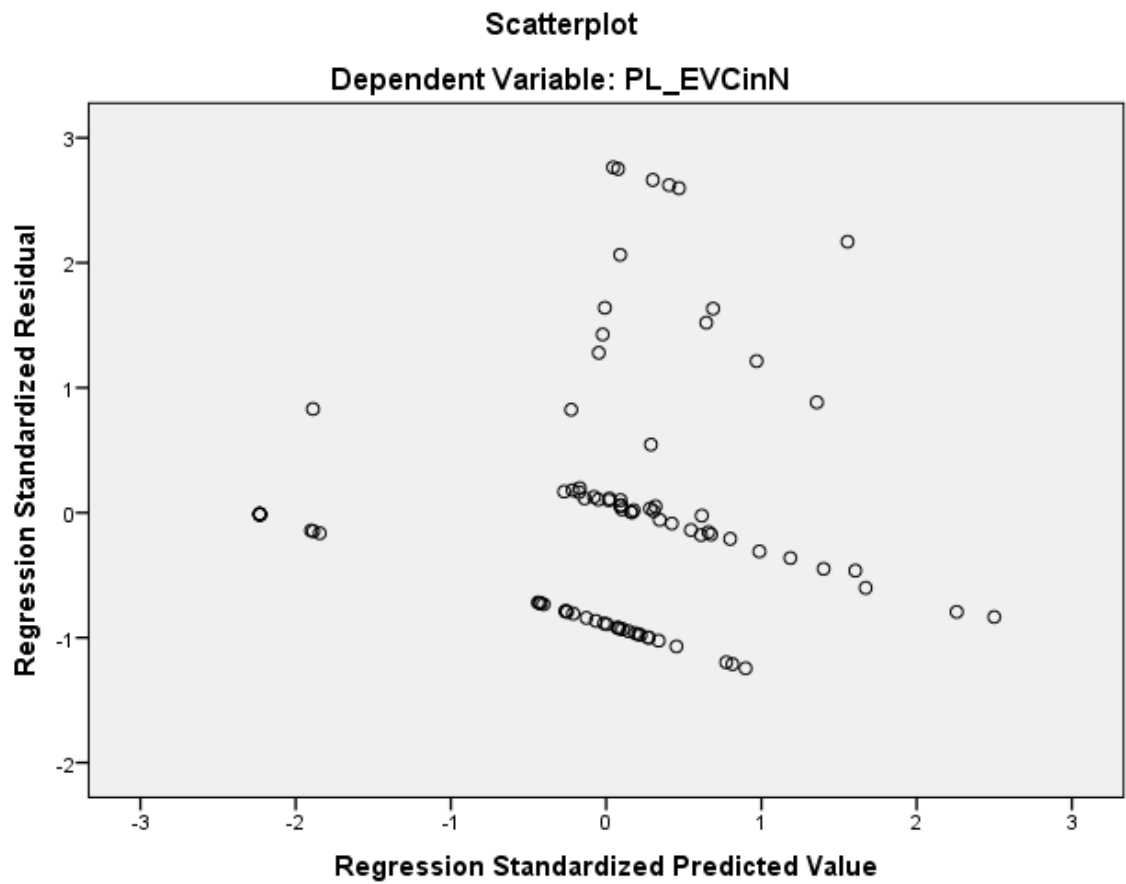
Deleted Residual	- .01525893155 4854	.03355468437 0756	- .00003131493 2223	.01207568695 9265
Stud. Deleted Residual	-1.263	2.895	.007	1.016
Mahal. Distance	.039	26.692	1.978	4.991
Cook's Distance	.000	.069	.006	.010
Centered Leverage Value	.000	.300	.022	.056

**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\_EVCinN

## Charts



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 TSpaths\_d  
AvgPL\_d AvgGL\_d PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

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

/SAVE COOK.

## Regression

### Notes

Output Created		06-JUN-2015 11:29:25
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 ECd  /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	00:00:00.23
	Elapsed Time	00:00:00.22
	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	AvgGL_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	.487 <sup>a</sup>	.237	.229	.00229908365 3115

a. Predictors: (Constant), AvgGL\_d

b. Dependent Variable: ECd

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



Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	27.677	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.001	90			

a. Dependent Variable: ECd

b. Predictors: (Constant), AvgGL\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.016	.001		16.420	.000
	AvgGL_d	-.450	.086	-.487	-5.261	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_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	-.004 <sup>b</sup>	-.043	.966	-.005	.999	1.001
	Edges_d	-.008 <sup>b</sup>	-.087	.931	-.009	1.000	1.000
	Reciprocity	-.013 <sup>b</sup>	-.116	.908	-.012	.704	1.420
	Den_d	.055 <sup>b</sup>	.570	.570	.061	.930	1.075
	CC_d	.156 <sup>b</sup>	1.434	.155	.151	.717	1.395
	GD_d	.145 <sup>b</sup>	.960	.340	.102	.376	2.660
	Tpaths_d	-.176 <sup>b</sup>	-1.048	.297	-.111	.304	3.292
	TSpaths_d	-.241 <sup>b</sup>	-1.864	.066	-.195	.499	2.003
	AvgPL_d	.347 <sup>b</sup>	1.650	.103	.173	.190	5.273
	PL_TpdN	-.084 <sup>b</sup>	-.892	.375	-.095	.972	1.029
	PL_TSpdN	-.115 <sup>b</sup>	-1.218	.226	-.129	.964	1.038
	S_d	.060 <sup>b</sup>	.644	.521	.068	.989	1.011
	R_d	-.027 <sup>b</sup>	-.292	.771	-.031	.982	1.018
	SMSP_d	.146 <sup>b</sup>	1.360	.177	.143	.741	1.350

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.999
	Edges_d	1.000
	Reciprocity	.704
	Den_d	.930
	CC_d	.717
	GD_d	.376
	Tpaths_d	.304
	TSpaths_d	.499
	AvgPL_d	.190
	PL_TpdN	.972
	PL_TSpdN	.964
	S_d	.989
	R_d	.982
	SMSP_d	.741

a. Dependent Variable: ECd

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	1.969	1.000	.02	.02
	2	.031	7.927	.98	.98

a. Dependent Variable: ECd

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00610860763 1177	.01191782392 5614	.01098901098 9011	.00127495187 9736
Std. Predicted Value	-3.828	.729	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00567101966 5897	.01196875609 4575	.01098704976 2462	.00129055209 1941
Residual	- .00602353923 0227	.00489421701 0587	.00000000000 0000	.00228627528 7978
Std. Residual	-2.620	2.129	.000	.994
Stud. Residual	-2.636	2.144	.000	1.006
Deleted Residual	- .00609571998 9389	.00496251881 1226	.00000196122 6549	.00234250948 5059
Stud. Deleted Residual	-2.729	2.189	-.005	1.021

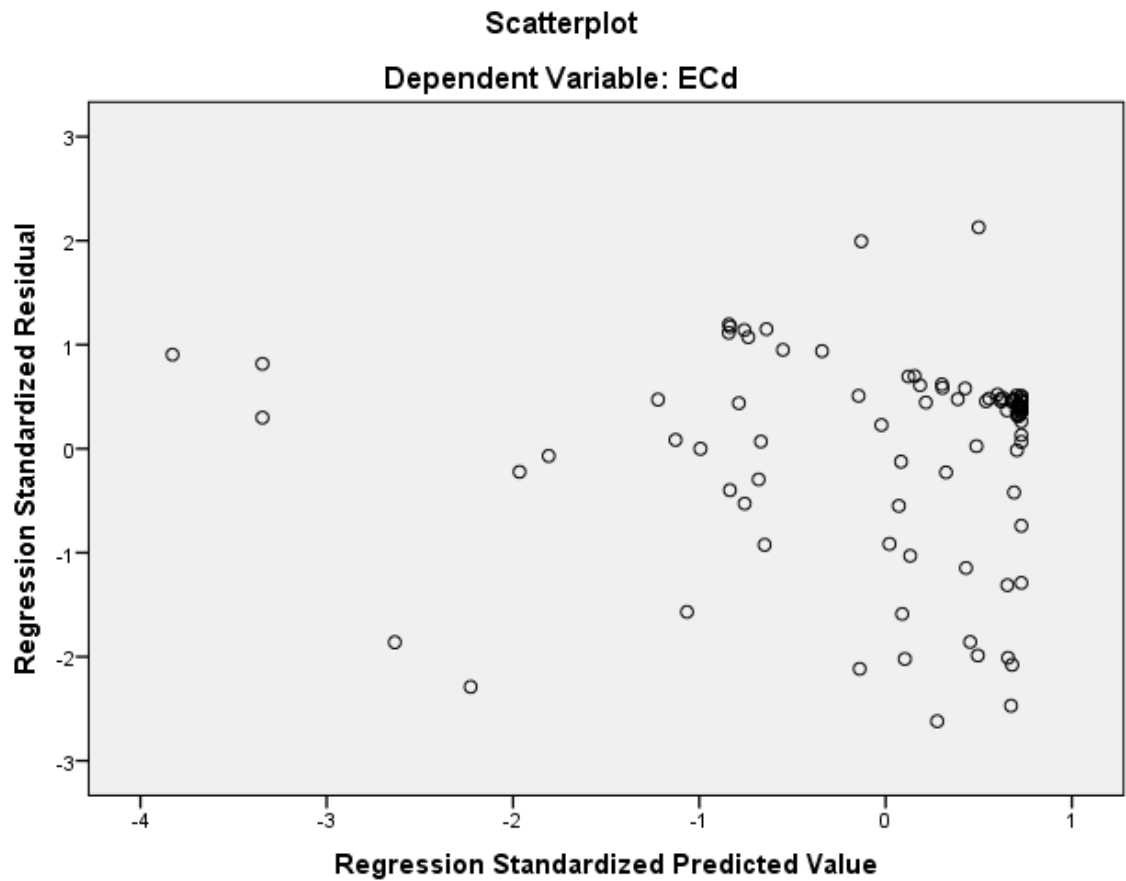
Mahal. Distance	.000	14.653	.989	2.345
Cook's Distance	.000	.199	.013	.031
Centered Leverage Value	.000	.163	.011	.026

#### 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

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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_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	00:00:00.23
	Elapsed Time	00:00:00.28
	Memory Required	17552 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	Reciprocity		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	CC_d		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
1	.659 <sup>a</sup>	.434	.428	.00825333570 0098
2	.745 <sup>b</sup>	.554	.544	.00736364167 5471
3	.760 <sup>c</sup>	.577	.563	.00721338964 1046

a. Predictors: (Constant), Reciprocity

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

c. Predictors: (Constant), Reciprocity, GD\_d, CC\_d

d. Dependent Variable: PL\_EVCdN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.005	1	.005	68.229	.000 <sup>b</sup>
	Residual	.006	89	.000		
	Total	.011	90			
2	Regression	.006	2	.003	54.759	.000 <sup>c</sup>
	Residual	.005	88	.000		
	Total	.011	90			
3	Regression	.006	3	.002	39.611	.000 <sup>d</sup>

Residual	.005	87	.000		
Total	.011	90			

a. Dependent Variable: PL\_EVCdN

b. Predictors: (Constant), Reciprocity

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

d. Predictors: (Constant), Reciprocity, GD\_d, CC\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.001		6.132	.000
	Reciprocity	.424	.051	.659	8.260	.000
2	(Constant)	-.002	.002		-.866	.389
	Reciprocity	.280	.054	.436	5.156	.000
	GD_d	.867	.178	.413	4.879	.000
3	(Constant)	-.003	.002		-1.486	.141
	Reciprocity	.320	.056	.498	5.683	.000
	GD_d	.965	.180	.459	5.366	.000
	CC_d	-.026	.012	-.179	-2.169	.033

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.708	1.412
	GD_d	.708	1.412
3	(Constant)		
	Reciprocity	.633	1.579
	GD_d	.664	1.507
	CC_d	.715	1.398

a. Dependent Variable: PL\_EVCdN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.052 <sup>b</sup>	-.653	.515	-.069	.995	1.005	.995
	Edges_d	-.039 <sup>b</sup>	-.481	.632	-.051	.997	1.003	.997
	Den_d	-.097 <sup>b</sup>	-1.224	.224	-.129	1.000	1.000	1.000

	CC_d	-.068 <sup>b</sup>	-.741	.461	-.079	.763	1.310	.763
	GD_d	.413 <sup>b</sup>	4.879	.000	.461	.708	1.412	.708
	Tpaths_d	.168 <sup>b</sup>	1.876	.064	.196	.772	1.295	.772
	TSpaths_d	.124 <sup>b</sup>	1.498	.138	.158	.908	1.101	.908
	AvgPL_d	.299 <sup>b</sup>	3.190	.002	.322	.658	1.520	.658
	AvgGL_d	.264 <sup>b</sup>	2.885	.005	.294	.704	1.420	.704
	PL_TpdN	.246 <sup>b</sup>	3.127	.002	.316	.939	1.065	.939
	PL_TSpdN	.245 <sup>b</sup>	3.174	.002	.320	.972	1.028	.972
	S_d	.048 <sup>b</sup>	.574	.567	.061	.912	1.097	.912
	R_d	.210 <sup>b</sup>	2.610	.011	.268	.920	1.086	.920
	SMSP_d	.032 <sup>b</sup>	.368	.714	.039	.839	1.192	.839
2	Nodes	-.023 <sup>c</sup>	-.325	.746	-.035	.988	1.012	.703
	Edges_d	-.017 <sup>c</sup>	-.243	.808	-.026	.993	1.007	.706
	Den_d	-.021 <sup>c</sup>	-.289	.773	-.031	.950	1.052	.673
	CC_d	-.179 <sup>c</sup>	-2.169	.033	-.226	.715	1.398	.633
	Tpaths_d	-.072 <sup>c</sup>	-.744	.459	-.080	.537	1.863	.492
	TSpaths_d	-.027 <sup>c</sup>	-.331	.741	-.036	.760	1.316	.593
	AvgPL_d	-.084 <sup>c</sup>	-.603	.548	-.065	.262	3.821	.262
	AvgGL_d	-.054 <sup>c</sup>	-.447	.656	-.048	.357	2.804	.357
	PL_TpdN	.125 <sup>c</sup>	1.576	.119	.167	.796	1.257	.600
	PL_TSpdN	.143 <sup>c</sup>	1.903	.060	.200	.865	1.156	.630
	S_d	.013 <sup>c</sup>	.177	.860	.019	.903	1.107	.678
	R_d	.100 <sup>c</sup>	1.277	.205	.136	.817	1.224	.629

	SMSP_d	-.087 <sup>c</sup>	-1.072	.287	-.114	.766	1.305	.647
3	Nodes	-.015 <sup>d</sup>	-.217	.828	-.023	.985	1.015	.633
	Edges_d	-.009 <sup>d</sup>	-.133	.894	-.014	.990	1.010	.633
	Den_d	-.004 <sup>d</sup>	-.060	.953	-.006	.939	1.065	.625
	Tpaths_d	.003 <sup>d</sup>	.026	.979	.003	.466	2.145	.466
	TSpaths_d	-.019 <sup>d</sup>	-.239	.812	-.026	.758	1.319	.566
	AvgPL_d	.193 <sup>d</sup>	1.071	.287	.115	.149	6.722	.149
	AvgGL_d	.017 <sup>d</sup>	.139	.889	.015	.330	3.032	.330
	PL_TpdN	.093 <sup>d</sup>	1.165	.247	.125	.760	1.316	.542
	PL_TSpdN	.115 <sup>d</sup>	1.516	.133	.161	.829	1.206	.572
	S_d	.047 <sup>d</sup>	.631	.529	.068	.866	1.155	.622
	R_d	.098 <sup>d</sup>	1.270	.208	.136	.817	1.224	.592
	SMSP_d	.162 <sup>d</sup>	1.176	.243	.126	.255	3.917	.238

a. Dependent Variable: PL\_EVCdN

b. Predictors in the Model: (Constant), Reciprocity

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

d. Predictors in the Model: (Constant), Reciprocity, GD\_d, CC\_d

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

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

1	1	1.546	1.000	.23	.23	
	2	.454	1.845	.77	.77	
2	1	2.436	1.000	.02	.06	.02
	2	.489	2.232	.09	.71	.01
	3	.075	5.682	.89	.24	.97
3	1	2.615	1.000	.02	.05	.02
	2	.957	1.653	.03	.02	.01
	3	.358	2.701	.05	.82	.01
	4	.070	6.103	.90	.11	.97

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

		Variance Proportions
Model	Dimension	CC_d
1	1	
	2	
2	1	
	2	
	3	
3	1	.03
	2	.51
	3	.39
	4	.08

a. Dependent Variable: PL\_EVCdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00147423578 8919	.03281644731 7600	.01098901098 9011	.00828865309 2459
Std. Predicted Value	-1.148	2.633	.000	1.000
Standard Error of Predicted Value	.001	.006	.001	.001
Adjusted Predicted Value	.00114048132 6729	.04548625648 0217	.01106358584 8861	.00866128387 7055
Residual	- .01537676900 6252	.01518571190 5360	.00000000000 0000	.00709214756 6835
Std. Residual	-2.132	2.105	.000	.983
Stud. Residual	-2.203	2.159	-.002	1.014
Deleted Residual	- .01690678484 7379	.01597353070 9744	- .00007457485 9850	.00766667190 3984
Stud. Deleted Residual	-2.255	2.207	-.002	1.021
Mahal. Distance	.380	66.456	2.967	7.779
Cook's Distance	.000	1.029	.025	.113
Centered Leverage Value	.004	.738	.033	.086

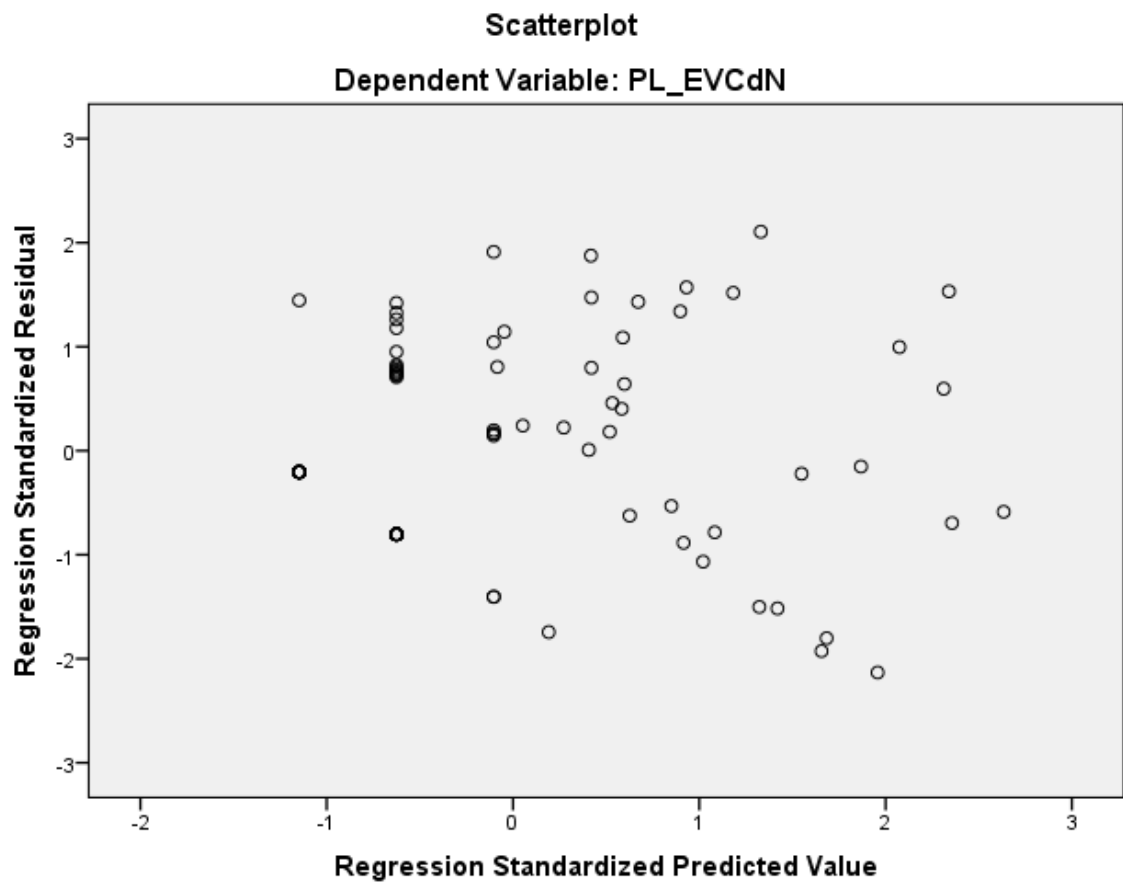
**Residuals Statistics<sup>a</sup>**



	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

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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 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	00:00:00.19
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Variables Created or Modified	COO_11	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\_TpdN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.295 <sup>a</sup>	.087	.077	.00446548314 5402

a. Predictors: (Constant), PL\_TSpdN

b. Dependent Variable: EVCd\_TpdN

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

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

1	Regression	.000	1	.000	8.494	.005 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			

a. Dependent Variable: EVCd\_TpdN

b. Predictors: (Constant), PL\_TSpdN

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.015	.001		10.806	.000
	PL_TSpdN	-.339	.116	-.295	-2.914	.005

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TSpdN	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	-.009 <sup>b</sup>	-.083	.934	-.009	.880	1.137
	Edges_d	-.009 <sup>b</sup>	-.079	.937	-.008	.886	1.128
	Reciprocity	-.079 <sup>b</sup>	-.770	.444	-.082	.972	1.028
	Den_d	.122 <sup>b</sup>	1.186	.239	.125	.960	1.042
	CC_d	.176 <sup>b</sup>	1.758	.082	.184	1.000	1.000
	GD_d	.079 <sup>b</sup>	.720	.473	.077	.867	1.154
	Tpaths_d	.074 <sup>b</sup>	.730	.468	.078	.997	1.003
	TSpaths_d	.011 <sup>b</sup>	.109	.914	.012	.986	1.014
	AvgPL_d	.140 <sup>b</sup>	1.372	.174	.145	.980	1.020
	AvgGL_d	.073 <sup>b</sup>	.705	.483	.075	.964	1.038
	PL_TpdN	.052 <sup>b</sup>	.363	.717	.039	.507	1.972
	S_d	.078 <sup>b</sup>	.696	.488	.074	.815	1.228
	R_d	-.020 <sup>b</sup>	-.153	.878	-.016	.613	1.632
	SMSP_d	.138 <sup>b</sup>	1.366	.175	.144	.998	1.002

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

Model	Collinearity Statistics
	Minimum Tolerance

1	Nodes	.880
	Edges_d	.886
	Reciprocity	.972
	Den_d	.960
	CC_d	1.000
	GD_d	.867
	Tpaths_d	.997
	TSpaths_d	.986
	AvgPL_d	.980
	AvgGL_d	.964
	PL_TpdN	.507
	S_d	.815
	R_d	.613
	SMSP_d	.998

a. Dependent Variable: EVCd\_TpdN

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	1.939	1.000	.03	.03
	2	.061	5.642	.97	.97

a. Dependent Variable: EVCd\_TpdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00706615252 4203	.01471643242 9850	.01098901098 9011	.00137183118 2978
Std. Predicted Value	-2.860	2.717	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00624465662 9860	.01518070045 8586	.01099048562 9336	.00140990139 4513
Residual	- .01139061711 7286	.00800845772 0280	.00000000000 0000	.00444060560 8406
Std. Residual	-2.551	1.793	.000	.994
Stud. Residual	-2.566	1.803	.000	1.005
Deleted Residual	- .01152827870 1007	.00809875782 5792	- .00000147464 0325	.00453516491 6690
Stud. Deleted Residual	-2.652	1.827	-.006	1.020
Mahal. Distance	.000	8.177	.989	2.020
Cook's Distance	.000	.166	.011	.023

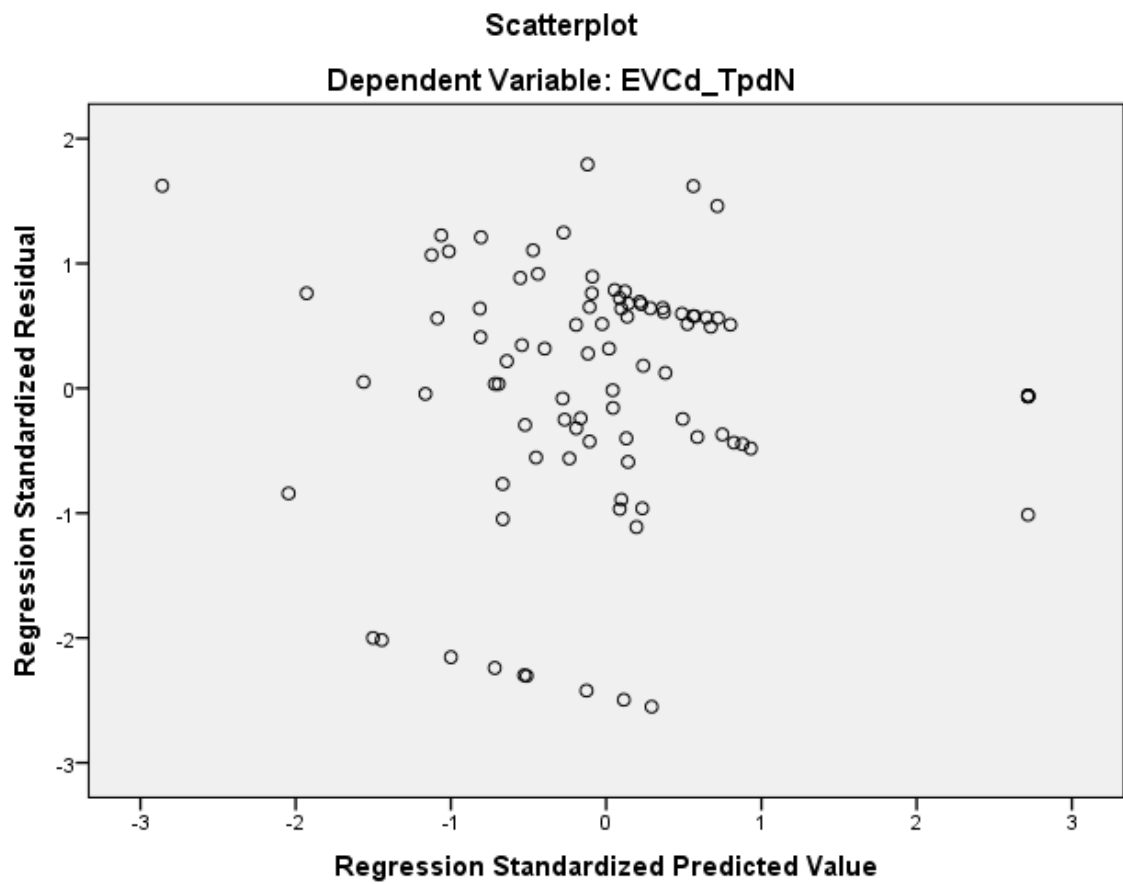
Centered Leverage Value	.000	.091	.011	.022
-------------------------	------	------	------	------

#### 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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	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 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	00:00:00.26
	Memory Required	17632 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
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	.344 <sup>a</sup>	.118	.108	.00446619285 5122

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	.000	1	.000	11.947	.001 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	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)	.015	.001		11.313	.000
	PL_TSpdN	-.402	.116	-.344	-3.456	.001

**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	-.030 <sup>b</sup>	-.283	.778	-.030	.880	1.137
	Edges_d	-.033 <sup>b</sup>	-.308	.759	-.033	.886	1.128
	Reciprocity	-.121 <sup>b</sup>	-1.197	.234	-.127	.972	1.028
	Den_d	.171 <sup>b</sup>	1.697	.093	.178	.960	1.042
	CC_d	.106 <sup>b</sup>	1.064	.290	.113	1.000	1.000
	GD_d	-.028 <sup>b</sup>	-.258	.797	-.027	.867	1.154
	Tpaths_d	-.003 <sup>b</sup>	-.030	.976	-.003	.997	1.003
	TSpaths_d	-.038 <sup>b</sup>	-.376	.708	-.040	.986	1.014
	AvgPL_d	.022 <sup>b</sup>	.214	.831	.023	.980	1.020
	AvgGL_d	-.010 <sup>b</sup>	-.101	.920	-.011	.964	1.038
	PL_TpdN	.054 <sup>b</sup>	.381	.704	.041	.507	1.972
	S_d	.025 <sup>b</sup>	.223	.824	.024	.815	1.228
	R_d	-.113 <sup>b</sup>	-.888	.377	-.094	.613	1.632
	SMSP_d	.054 <sup>b</sup>	.539	.591	.057	.998	1.002

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

Model	Collinearity Statistics
	Minimum Tolerance



1	Nodes	.880
	Edges_d	.886
	Reciprocity	.972
	Den_d	.960
	CC_d	1.000
	GD_d	.867
	Tpaths_d	.997
	TSpaths_d	.986
	AvgPL_d	.980
	AvgGL_d	.964
	PL_TpdN	.507
	S_d	.815
	R_d	.613
	SMSP_d	.998

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	1.939	1.000	.03	.03
	2	.061	5.642	.97	.97

a. Dependent Variable: EVCd\_TSpdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00633582938 4625	.01541037112 4744	.01098901098 9011	.00162722648 3470
Std. Predicted Value	-2.860	2.717	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00539099005 9823	.01592116989 1953	.01099348726 7626	.00166995496 2794
Residual	- .01146538369 3576	.00833223946 3925	.00000000000 0000	.00444131136 4280
Std. Residual	-2.567	1.866	.000	.994
Stud. Residual	-2.583	1.969	.000	1.005
Deleted Residual	- .01160394959 1517	.00927707832 3066	- .00000447627 8615	.00454029307 2436
Stud. Deleted Residual	-2.670	2.002	-.006	1.019
Mahal. Distance	.000	8.177	.989	2.020
Cook's Distance	.000	.220	.011	.027

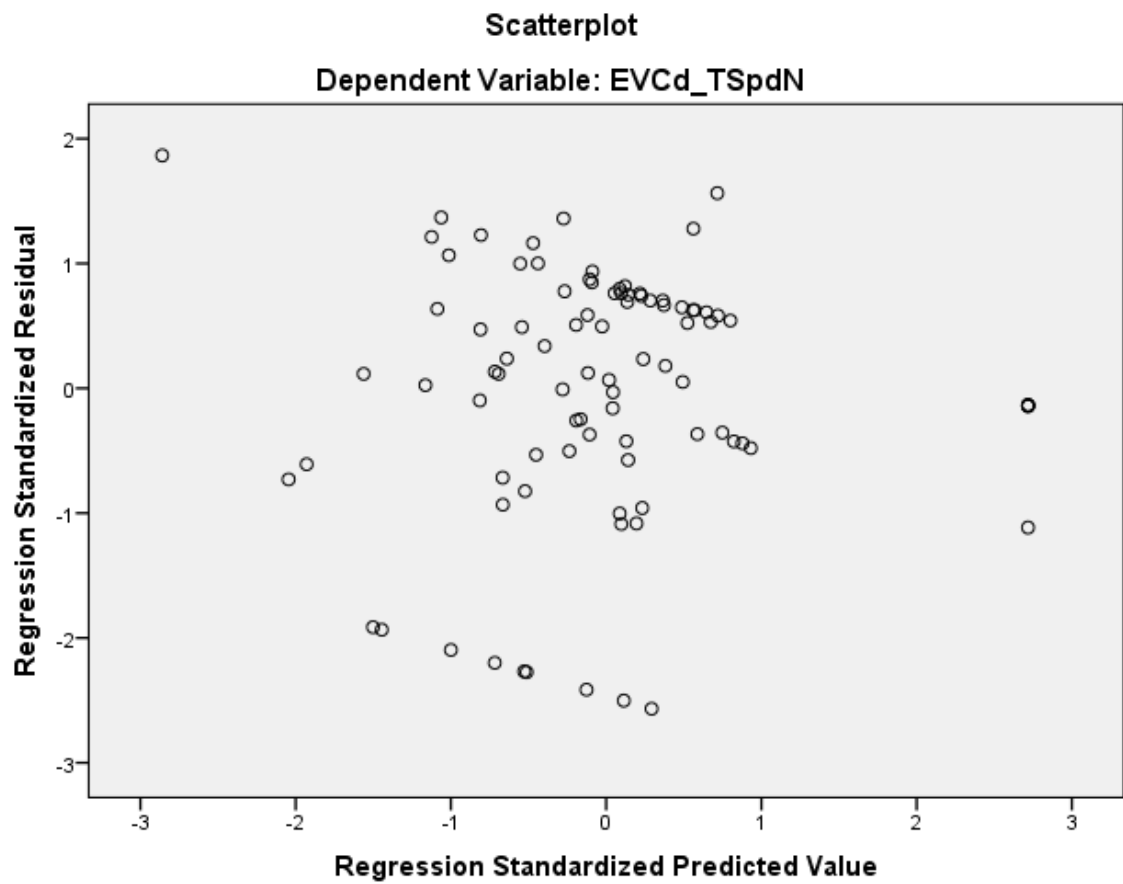
Centered Leverage Value	.000	.091	.011	.022
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#### Residuals Statistics<sup>a</sup>

	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\_TSpdN

## 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 TSpaths\_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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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 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	00:00:00.29
	Memory Required	17680 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_13	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	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCdN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659 <sup>a</sup>	.434	.427	.00817815121 4688
2	.756 <sup>b</sup>	.571	.561	.00715873389 9260

a. Predictors: (Constant), Reciprocity

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

c. Dependent Variable: PL\_EVCdN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.005	1	.005	67.455	.000 <sup>b</sup>
	Residual	.006	88	.000		
	Total	.010	89			
2	Regression	.006	2	.003	57.941	.000 <sup>c</sup>
	Residual	.004	87	.000		
	Total	.010	89			

a. Dependent Variable: PL\_EVCdN

b. Predictors: (Constant), Reciprocity

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

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

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	.006	.001		5.840	.000
	Reciprocity	.464	.056	.659	8.213	.000
2	(Constant)	-.002	.002		-1.329	.187
	Reciprocity	.325	.056	.462	5.820	.000
	GD_d	.918	.174	.419	5.277	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.781	1.281
	GD_d	.781	1.281

a. Dependent Variable: PL\_EVCdN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	-.051 <sup>b</sup>	-.637	.526	-.068	.995	1.005

	Edges_d	-.037 <sup>b</sup>	-.462	.645	-.049	.997	1.003
	Den_d	-.081 <sup>b</sup>	-1.005	.318	-.107	.997	1.003
	CC_d	.086 <sup>b</sup>	1.043	.300	.111	.940	1.064
	GD_d	.419 <sup>b</sup>	5.277	.000	.492	.781	1.281
	Tpaths_d	.206 <sup>b</sup>	2.467	.016	.256	.871	1.148
	TSpaths_d	.130 <sup>b</sup>	1.578	.118	.167	.932	1.073
	AvgPL_d	.361 <sup>b</sup>	4.383	.000	.425	.786	1.273
	AvgGL_d	.291 <sup>b</sup>	3.438	.001	.346	.801	1.249
	PL_TpdN	.238 <sup>b</sup>	2.991	.004	.305	.930	1.075
	PL_TSpdN	.233 <sup>b</sup>	2.965	.004	.303	.954	1.048
	S_d	.052 <sup>b</sup>	.620	.537	.066	.932	1.073
	R_d	.205 <sup>b</sup>	2.521	.014	.261	.920	1.087
	SMSP_d	.086 <sup>b</sup>	1.043	.300	.111	.940	1.064
2	Nodes	-.020 <sup>c</sup>	-.275	.784	-.030	.988	1.013
	Edges_d	-.014 <sup>c</sup>	-.197	.844	-.021	.993	1.007
	Den_d	.010 <sup>c</sup>	.144	.886	.016	.938	1.066
	CC_d	-.019 <sup>c</sup>	-.252	.802	-.027	.871	1.149
	Tpaths_d	-.014 <sup>c</sup>	-.156	.876	-.017	.613	1.632
	TSpaths_d	-.029 <sup>c</sup>	-.366	.715	-.039	.781	1.280
	AvgPL_d	.077 <sup>c</sup>	.586	.560	.063	.287	3.479
	AvgGL_d	.003 <sup>c</sup>	.029	.977	.003	.410	2.439
	PL_TpdN	.098 <sup>c</sup>	1.235	.220	.132	.776	1.288

PL_TSpdN	.112 <sup>c</sup>	1.473	.145	.157	.833	1.200
S_d	.016 <sup>c</sup>	.216	.830	.023	.924	1.082
R_d	.081 <sup>c</sup>	1.032	.305	.111	.810	1.235
SMSP_d	-.019 <sup>c</sup>	-.252	.802	-.027	.871	1.149

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.995
	Edges_d	.997
	Den_d	.997
	CC_d	.940
	GD_d	.781
	Tpaths_d	.871
	TSpaths_d	.932
	AvgPL_d	.786
	AvgGL_d	.801
	PL_TpdN	.930
	PL_TSpdN	.954
	S_d	.932
	R_d	.920
	SMSP_d	.940

2	Nodes	.775
	Edges_d	.778
	Den_d	.734
	CC_d	.723
	Tpaths_d	.549
	TSpaths_d	.654
	AvgPL_d	.286
	AvgGL_d	.400
	PL_TpdN	.651
	PL_TSpdN	.682
	S_d	.752
	R_d	.687
	SMSP_d	.723

a. Dependent Variable: PL\_EVCdN

b. Predictors in the Model: (Constant), Reciprocity

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

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

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

1	1	1.556	1.000	.22	.22	
	2	.444	1.872	.78	.78	
2	1	2.433	1.000	.02	.06	.02
	2	.489	2.231	.08	.78	.02
	3	.077	5.607	.90	.16	.96

a. Dependent Variable: PL\_EVCdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00165757094 5099	.03705362230 5393	.01079356143 1150	.00816861431 8165
Std. Predicted Value	-1.118	3.215	.000	1.000
Standard Error of Predicted Value	.001	.004	.001	.000
Adjusted Predicted Value	.00134472735 2262	.03732578083 8728	.01075721818 2003	.00813324823 5136
Residual	- .01514188665 8967	.01522540114 8200	.00000000000 0000	.00707784165 3902
Std. Residual	-2.115	2.127	.000	.989
Stud. Residual	-2.178	2.178	.002	1.011
Deleted Residual	- .01605923101 3060	.01643663644 7906	.00003634324 9148	.00741929816 7167

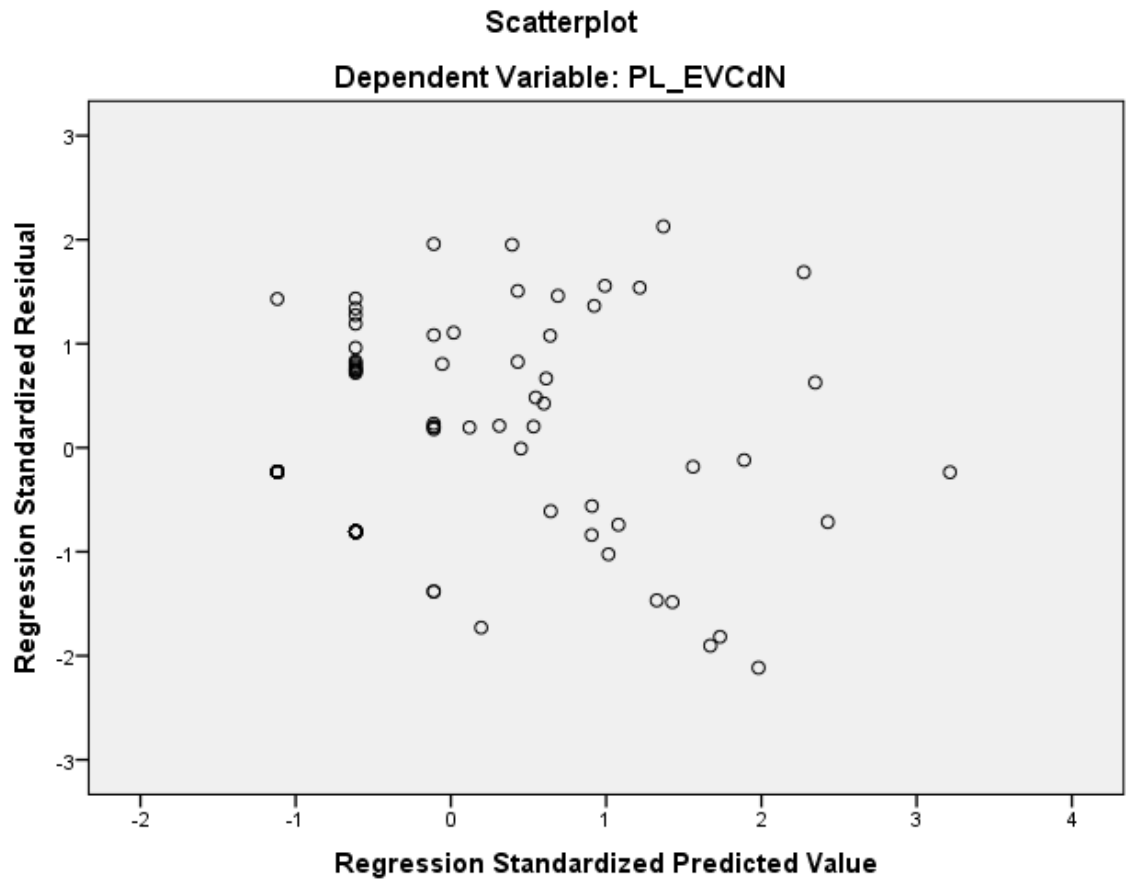
Stud. Deleted Residual	-2.227	2.227	.004	1.019
Mahal. Distance	.288	22.608	1.978	3.135
Cook's Distance	.000	.466	.017	.052
Centered Leverage Value	.003	.254	.022	.035

**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 ECd

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

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

/SAVE COOK.

## Regression

### Notes

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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 ECd  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.27
	Elapsed Time		00:00:00.26
	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	AvgGL_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	.487 <sup>a</sup>	.237	.229	.00229908365 3115

a. Predictors: (Constant), AvgGL\_d

b. Dependent Variable: ECd

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

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

1	Regression	.000	1	.000	27.677	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.001	90			

a. Dependent Variable: ECd

b. Predictors: (Constant), AvgGL\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.016	.001		16.420	.000
	AvgGL_d	-.450	.086	-.487	-5.261	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_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	.145 <sup>b</sup>	.960	.340	.102	.376	2.660
	Tpaths_d	-.176 <sup>b</sup>	-1.048	.297	-.111	.304	3.292
	TSpaths_d	-.241 <sup>b</sup>	-1.864	.066	-.195	.499	2.003
	AvgPL_d	.347 <sup>b</sup>	1.650	.103	.173	.190	5.273

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.376	
	Tpaths_d	.304	
	TSpaths_d	.499	
	AvgPL_d	.190	

a. Dependent Variable: ECd

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

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

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

		Index	(Constant)	AvgGL_d
1	1	1.969	1.000	.02
	2	.031	7.927	.98

a. Dependent Variable: ECd

# Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00610860763 1177	.01191782392 5614	.01098901098 9011	.00127495187 9736
Std. Predicted Value	-3.828	.729	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00567101966 5897	.01196875609 4575	.01098704976 2462	.00129055209 1941
Residual	- .00602353923 0227	.00489421701 0587	.00000000000 0000	.00228627528 7978
Std. Residual	-2.620	2.129	.000	.994
Stud. Residual	-2.636	2.144	.000	1.006
Deleted Residual	- .00609571998 9389	.00496251881 1226	.00000196122 6549	.00234250948 5059
Stud. Deleted Residual	-2.729	2.189	-.005	1.021
Mahal. Distance	.000	14.653	.989	2.345

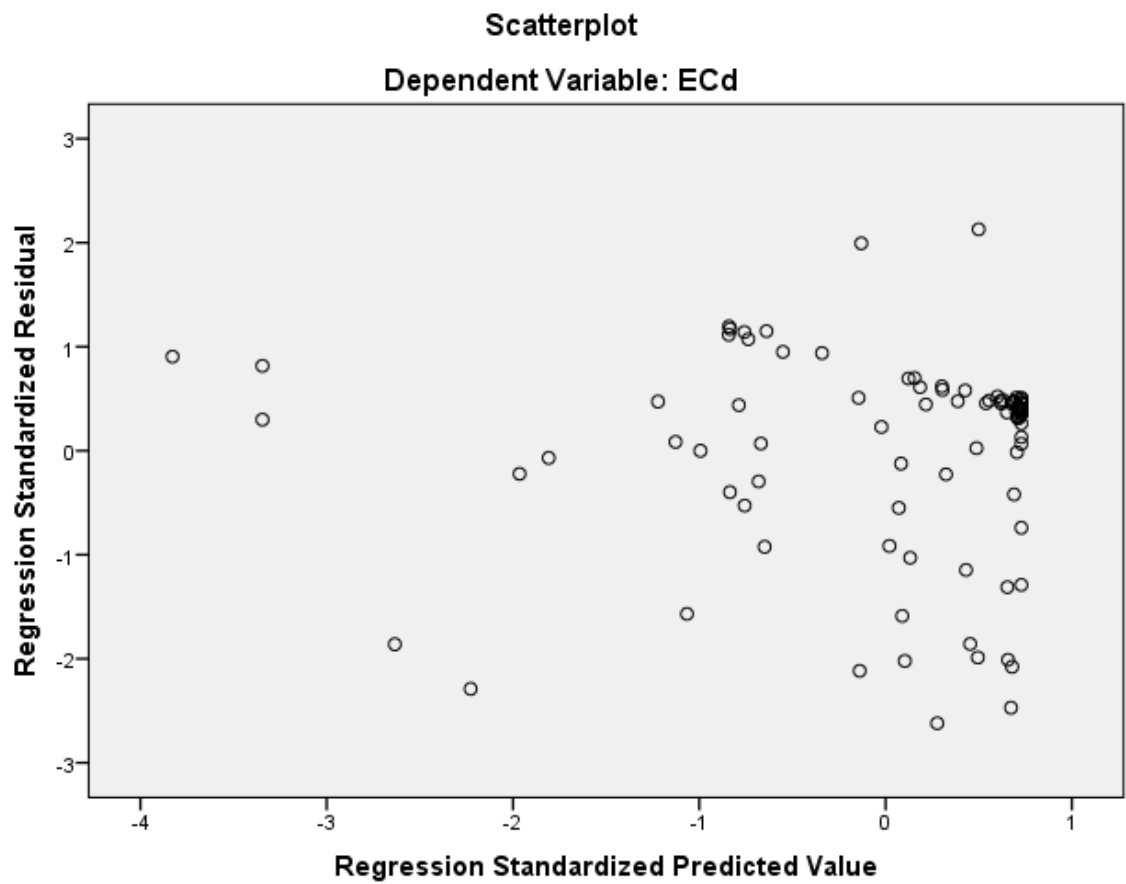
Cook's Distance	.000	.199	.013	.031
Centered Leverage Value	.000	.163	.011	.026

#### 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

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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 PL_EVCdN
		/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	00:00:00.20
	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	GD_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	.648 <sup>a</sup>	.420	.413	.00835524076 4624

a. Predictors: (Constant), GD\_d

b. Dependent Variable: PL\_EVCdN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	64.417	.000 <sup>b</sup>
	Residual	.006	89	.000		

Total	.011	90			
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a. Dependent Variable: PL\_EVCdN

b. Predictors: (Constant), GD\_d

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.004	.002		-1.931	.057
GD_d	1.362	.170	.648	8.026	.000

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

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
GD_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	Tpaths_d	.022 <sup>b</sup>	.202	.840	.022	.556	1.798
	TSpaths_d	-.005 <sup>b</sup>	-.049	.961	-.005	.762	1.312
	AvgPL_d	.119 <sup>b</sup>	.782	.436	.083	.285	3.511
	AvgGL_d	.085 <sup>b</sup>	.645	.520	.069	.376	2.660

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376

a. Dependent Variable: PL\_EVCdN

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	1.905	1.000	.05	.05
	2	.095	4.482	.95	.95

a. Dependent Variable: PL\_EVCdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00212872331 0307	.03877809643 7454	.01098901098 9011	.00706865943 1934
Std. Predicted Value	-1.253	3.931	.000	1.000
Standard Error of Predicted Value	.001	.004	.001	.000
Adjusted Predicted Value	.00163908372 6332	.03818365558 9819	.01098879213 7482	.00706282747 6566
Residual	- .01434518024 3254	.02285302989 1849	.00000000000 0000	.00830869310 0135
Std. Residual	-1.717	2.735	.000	.994
Stud. Residual	-1.729	2.754	.000	1.003
Deleted Residual	- .01454139966 5177	.02316562086 3438	.00000021885 1529	.00845668833 2359
Stud. Deleted Residual	-1.748	2.863	.003	1.014
Mahal. Distance	.152	15.455	.989	2.118
Cook's Distance	.001	.060	.009	.012

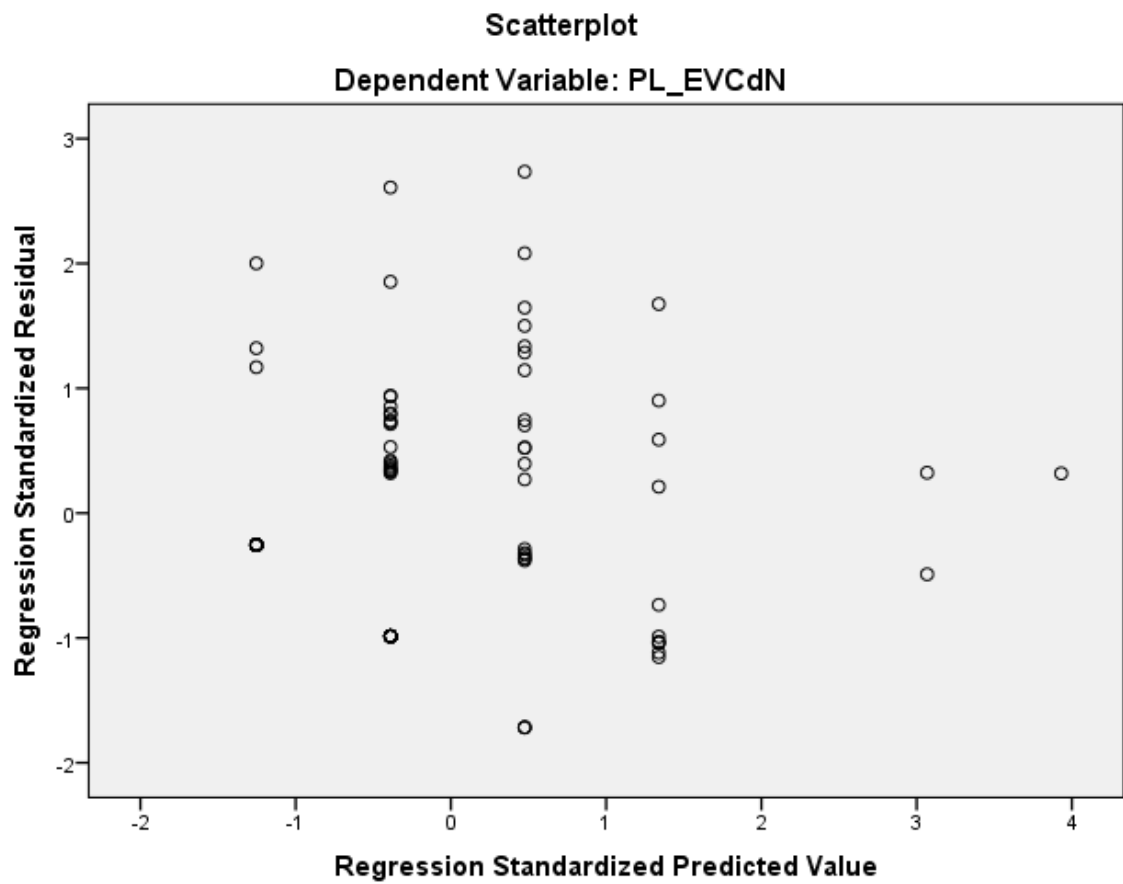
Centered Leverage Value	.002	.172	.011	.024
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# Residuals Statistics<sup>a</sup>

	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\_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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Comments		
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	N of Rows in Working Data File	91
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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	00:00:00.03
	Elapsed Time	00:00:00.04
	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	06-JUN-2015 11:25:57	
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 EVCd_TSpdN  /METHOD=STEPWISE GD_d Tpaths_d TSpdpaths_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04
	Memory Required	6032 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Created or Modified	COO_4	Cook's Distance
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### 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\_TpdN

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

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

/SAVE COOK.

### Regression

## Notes

Output Created		06-JUN-2015 11:14:44
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 PL_TpdN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpats_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.25
	Elapsed Time	00:00:00.26
	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	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\_TpdN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452 <sup>a</sup>	.204	.195	.00376706697 6908
2	.603 <sup>b</sup>	.364	.350	.00338638883 3870

a. Predictors: (Constant), GD\_d

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

c. Dependent Variable: PL\_TpdN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	22.832	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	25.194	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

a. Dependent Variable: PL\_TpdN

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)	.007	.001		7.504	.000



	GD_d	.366	.077	.452	4.778	.000
2	(Constant)	.016	.002		7.631	.000
	GD_d	.655	.092	.809	7.098	.000
	Tpaths_d	-1.116	.237	-.536	-4.705	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.556	1.798
	Tpaths_d	.556	1.798

a. Dependent Variable: PL\_TpdN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.536 <sup>b</sup>	-4.705	.000	-.448	.556	1.798
	TSpaths_d	-.456 <sup>b</sup>	-4.684	.000	-.447	.762	1.312
	AvgPL_d	-.453 <sup>b</sup>	-2.638	.010	-.271	.285	3.511

	AvgGL_d	-.501 <sup>b</sup>	-3.441	.001	-.344	.376	2.660
2	TSpaths_d	-.227 <sup>c</sup>	-.893	.374	-.095	.112	8.934
	AvgPL_d	.016 <sup>c</sup>	.081	.936	.009	.176	5.675
	AvgGL_d	-.113 <sup>c</sup>	-.598	.551	-.064	.205	4.871

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376
2	TSpaths_d	.082
	AvgPL_d	.176
	AvgGL_d	.205

a. Dependent Variable: PL\_TpdN

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
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			Index	(Constant)	GD_d	Tpaths_d
1	1	1.905	1.000	.05	.05	
	2	.095	4.482	.95	.95	
2	1	2.887	1.000	.00	.01	.00
	2	.102	5.325	.09	.63	.01
	3	.011	16.181	.91	.36	.99

a. Dependent Variable: PL\_TpdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00067203090 2933	.01981520839 0355	.01098901098 9011	.00253384102 1022
Std. Predicted Value	-4.072	3.483	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00092916277 9357	.02061300352 2158	.01100772047 5229	.00254732610 6259
Residual	- .01129487808 7938	.00983234029 2633	.00000000000 0000	.00334855089 9529
Std. Residual	-3.335	2.903	.000	.989
Stud. Residual	-3.360	2.932	-.003	1.005

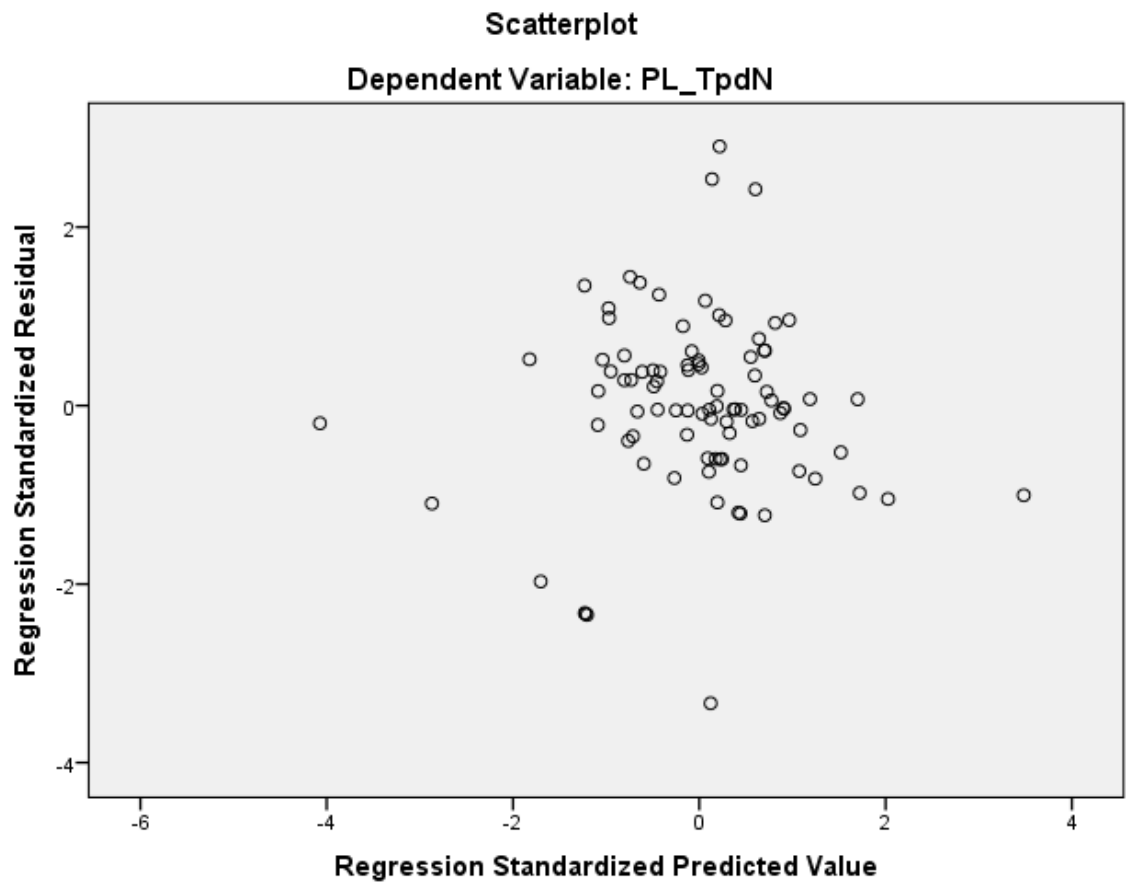
Deleted Residual	- .01146558392 7929	.01002532895 6544	- .00001870948 6218	.00345907833 0324
Stud. Deleted Residual	-3.579	3.069	-.004	1.029
Mahal. Distance	.153	23.917	1.978	3.830
Cook's Distance	.000	.119	.011	.023
Centered Leverage Value	.002	.266	.022	.043

**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

Output Created	06-JUN-2015 11:15:56	
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 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	00:00:00.19
	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).
2	Tpaths_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	.365 <sup>a</sup>	.133	.124	.00378611881 8920
2	.545 <sup>b</sup>	.297	.281	.00342989237 6889



a. Predictors: (Constant), GD\_d

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

c. Dependent Variable: PL\_TSpdN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	13.696	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	18.568	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			

a. Dependent Variable: PL\_TSpdN

b. Predictors: (Constant), GD\_d

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

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

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	.008	.001		8.420	.000
	GD_d	.285	.077	.365	3.701	.000
2	(Constant)	.017	.002		7.838	.000
	GD_d	.566	.093	.726	6.059	.000
	Tpaths_d	-1.087	.240	-.542	-4.522	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.556	1.798
	Tpaths_d	.556	1.798

a. Dependent Variable: PL\_TSpdN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.542 <sup>b</sup>	-4.522	.000	-.434	.556	1.798

	TSpaths_d	-.387 <sup>b</sup>	-3.649	.000	-.363	.762	1.312
	AvgPL_d	-.588 <sup>b</sup>	-3.359	.001	-.337	.285	3.511
	AvgGL_d	-.261 <sup>b</sup>	-1.638	.105	-.172	.376	2.660
2	TSpaths_d	.280 <sup>c</sup>	1.047	.298	.112	.112	8.934
	AvgPL_d	-.194 <sup>c</sup>	-.912	.364	-.097	.176	5.675
	AvgGL_d	.335 <sup>c</sup>	1.717	.090	.181	.205	4.871

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376
2	TSpaths_d	.082
	AvgPL_d	.176
	AvgGL_d	.205

a. Dependent Variable: PL\_TSpdN

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 Index	Variance Proportions		
				(Constant)	GD_d	Tpaths_d
1	1	1.905	1.000	.05	.05	
	2	.095	4.482	.95	.95	
2	1	2.887	1.000	.00	.01	.00
	2	.102	5.325	.09	.63	.01
	3	.011	16.181	.91	.36	.99

a. Dependent Variable: PL\_TSpdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00140954775 2701	.01812628656 6257	.01098901098 9011	.00220322105 6245
Std. Predicted Value	-4.348	3.239	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00194886769 1681	.01968709193 1701	.01102243046 2606	.00222698715 3329
Residual	- .00848001241 6840	.01088244374 8415	.00000000000 0000	.00339156835 4185
Std. Residual	-2.472	3.173	.000	.989

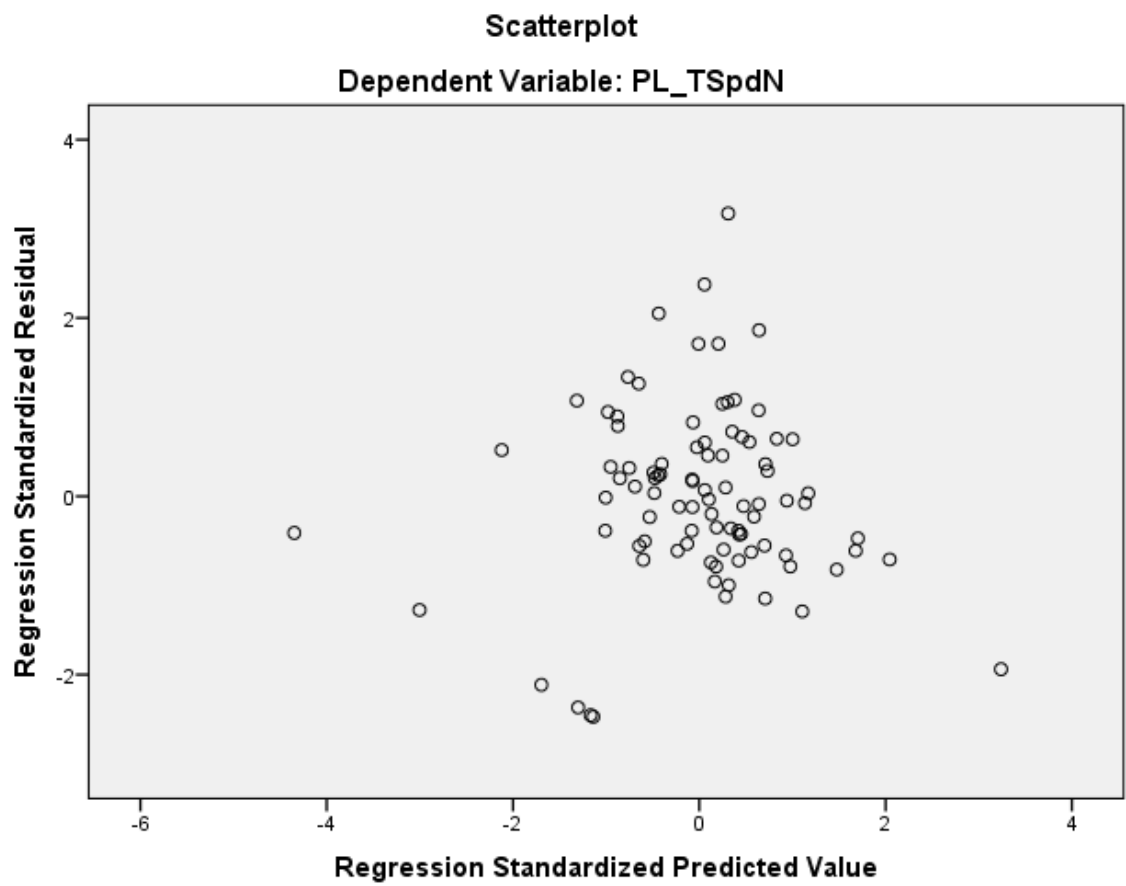
Stud. Residual	-2.511	3.204	-.005	1.008
Deleted Residual	-	.01109604444	-	.00353021139
	.00874448381	3548	.00003341947	4233
	3643		3595	
Stud. Deleted Residual	-2.591	3.389	-.004	1.027
Mahal. Distance	.153	23.917	1.978	3.830
Cook's Distance	.000	.363	.014	.041
Centered Leverage Value	.002	.266	.022	.043

#### 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		06-JUN-2015 11:16:19
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 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	00:00:00.22
	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	TSpaths_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\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.319 <sup>a</sup>	.102	.092	.00440430386 5372

2	.622 <sup>b</sup>	.387	.373	.00366090538 5770
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a. Predictors: (Constant), TSpaths\_d

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

c. Dependent Variable: S\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	10.105	.002 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	27.720	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

a. Dependent Variable: S\_d

b. Predictors: (Constant), TSpaths\_d

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.021	.003		6.528	.000
	TSpaths_d	-.931	.293	-.319	-3.179	.002
2	(Constant)	.028	.003		9.577	.000
	TSpaths_d	-4.751	.646	-1.630	-7.359	.000
	Tpaths_d	3.242	.507	1.415	6.389	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.142	7.039
	Tpaths_d	.142	7.039

a. Dependent Variable: S\_d

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

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

					Correlation	Tolerance	VIF
1	GD_d	.516 <sup>b</sup>	5.073	.000	.476	.762	1.312
	Tpaths_d	1.415 <sup>b</sup>	6.389	.000	.563	.142	7.039
	AvgPL_d	.623 <sup>b</sup>	6.063	.000	.543	.681	1.468
	AvgGL_d	.666 <sup>b</sup>	5.363	.000	.496	.499	2.003
2	GD_d	.205 <sup>c</sup>	1.642	.104	.173	.438	2.283
	AvgPL_d	.187 <sup>c</sup>	.721	.473	.077	.105	9.560
	AvgGL_d	.289 <sup>c</sup>	1.834	.070	.193	.274	3.652

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.762
	Tpaths_d	.142
	AvgPL_d	.681
	AvgGL_d	.499
2	GD_d	.082
	AvgPL_d	.022
	AvgGL_d	.078

a. Dependent Variable: S\_d

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpaths_d	Tpaths_d
1	1	1.990	1.000	.01	.01	
	2	.010	14.008	.99	.99	
2	1	2.981	1.000	.00	.00	.00
	2	.018	13.028	.64	.01	.08
	3	.002	41.073	.36	.99	.92

a. Dependent Variable: S\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00040102496 8596	.02532823570 0727	.01098901098 9011	.00287330957 5202
Std. Predicted Value	-3.685	4.990	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	- .00060374336 3172	.03457868471 7417	.01105083569 9068	.00346362579 3314

Residual	- .00980398524 5526	.01379565987 7360	.00000000000 0000	.00362000013 1113
Std. Residual	-2.678	3.768	.000	.989
Stud. Residual	-3.137	3.793	-.006	1.044
Deleted Residual	- .01700535602 8676	.01397545915 0970	- .00006182471 0057	.00414643122 9791
Stud. Deleted Residual	-3.309	4.123	-.004	1.076
Mahal. Distance	.011	47.969	1.978	6.056
Cook's Distance	.000	3.912	.064	.426
Centered Leverage Value	.000	.533	.022	.067

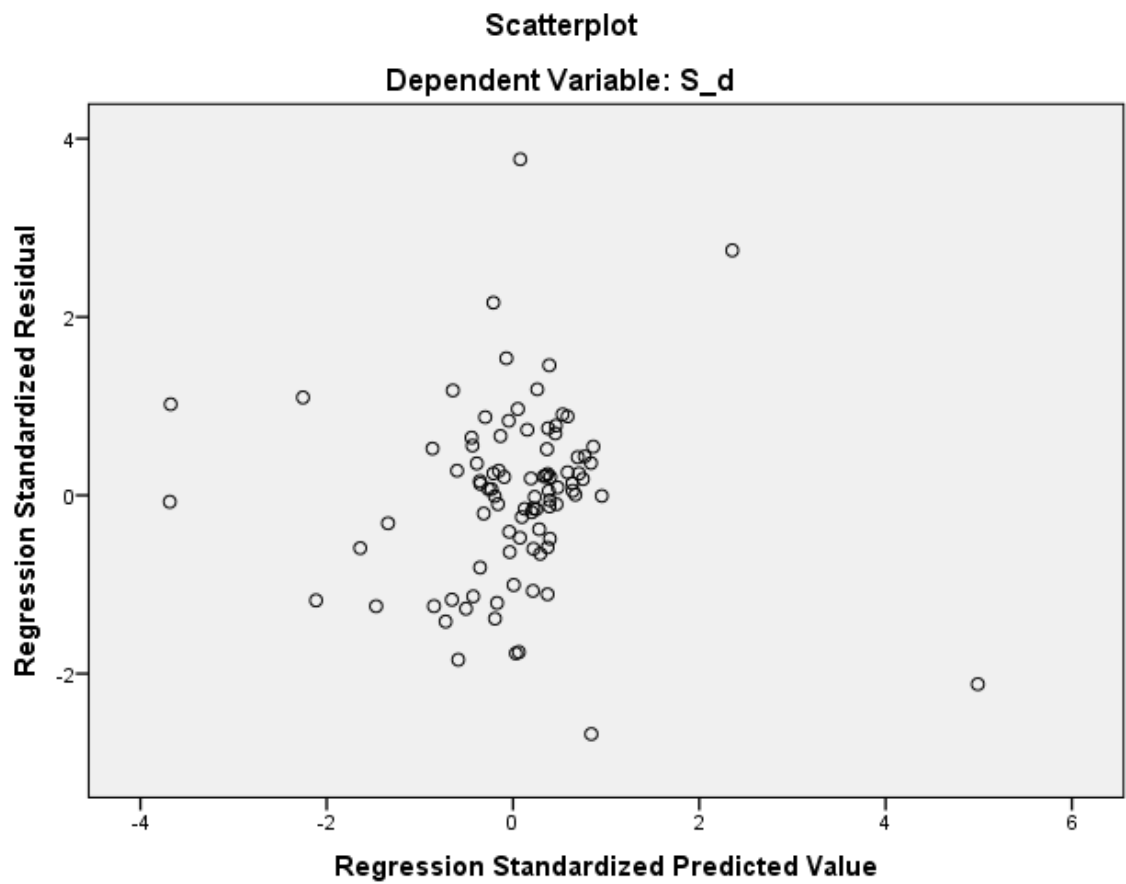
#### Residuals Statistics<sup>a</sup>

	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 TSpaths\_d AvgPL\_d AvgGL\_d

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

/SAVE COOK.

## Regression

### Notes

Output Created	06-JUN-2015 11:16:40	
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 R_d  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.23
	Elapsed Time	00:00:00.26
	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	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	.423 <sup>a</sup>	.179	.170	.00030514607 1951
2	.618 <sup>b</sup>	.382	.368	.00026631528 9872

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	19.383	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	27.147	.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		142.048	.000
	GD_d	.027	.006	.423	4.403	.000
2	(Constant)	.012	.000		58.342	.000
	GD_d	.044	.006	.674	7.023	.000
	TSpaths_d	-.109	.020	-.516	-5.371	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.762	1.312
	TSpaths_d	.762	1.312

a. Dependent Variable: R\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.526 <sup>b</sup>	-4.505	.000	-.433	.556	1.798
	TSpaths_d	-.516 <sup>b</sup>	-5.371	.000	-.497	.762	1.312
	AvgPL_d	-.340 <sup>b</sup>	-1.918	.058	-.200	.285	3.511
	AvgGL_d	-.535 <sup>b</sup>	-3.643	.000	-.362	.376	2.660
2	Tpaths_d	.215 <sup>c</sup>	.732	.466	.078	.082	12.246
	AvgPL_d	-.072 <sup>c</sup>	-.432	.667	-.046	.254	3.931
	AvgGL_d	-.145 <sup>c</sup>	-.848	.399	-.091	.240	4.173

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	Tpaths_d	.556	
	TSpaths_d	.762	
	AvgPL_d	.285	
	AvgGL_d	.376	
2	Tpaths_d	.082	

AvgPL_d	.254
AvgGL_d	.240

- 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	1.905	1.000	.05	.05	
	2	.095	4.482	.95	.95	
2	1	2.881	1.000	.00	.02	.00
	2	.111	5.106	.04	.83	.01
	3	.009	18.166	.96	.15	.98

- a. Dependent Variable: R\_d

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

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

Predicted Value	.01005995459 8546	.01163047272 7120	.01098901098 9011	.00020684631 3210
Std. Predicted Value	-4.492	3.101	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.01003363262 8620	.01181539706 8858	.01099074922 7154	.00021415093 2777
Residual	- .00080809864 4484	.00073132303 0777	.00000000000 0000	.00026333960 6645
Std. Residual	-3.034	2.746	.000	.989
Stud. Residual	-3.364	2.765	-.003	1.016
Deleted Residual	- .00099302316 0845	.00074138754 2803	- .00000173823 8143	.00027851321 1476
Stud. Deleted Residual	-3.583	2.877	-.006	1.037
Mahal. Distance	.152	26.419	1.978	3.880
Cook's Distance	.000	.863	.020	.094
Centered Leverage Value	.002	.294	.022	.043

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

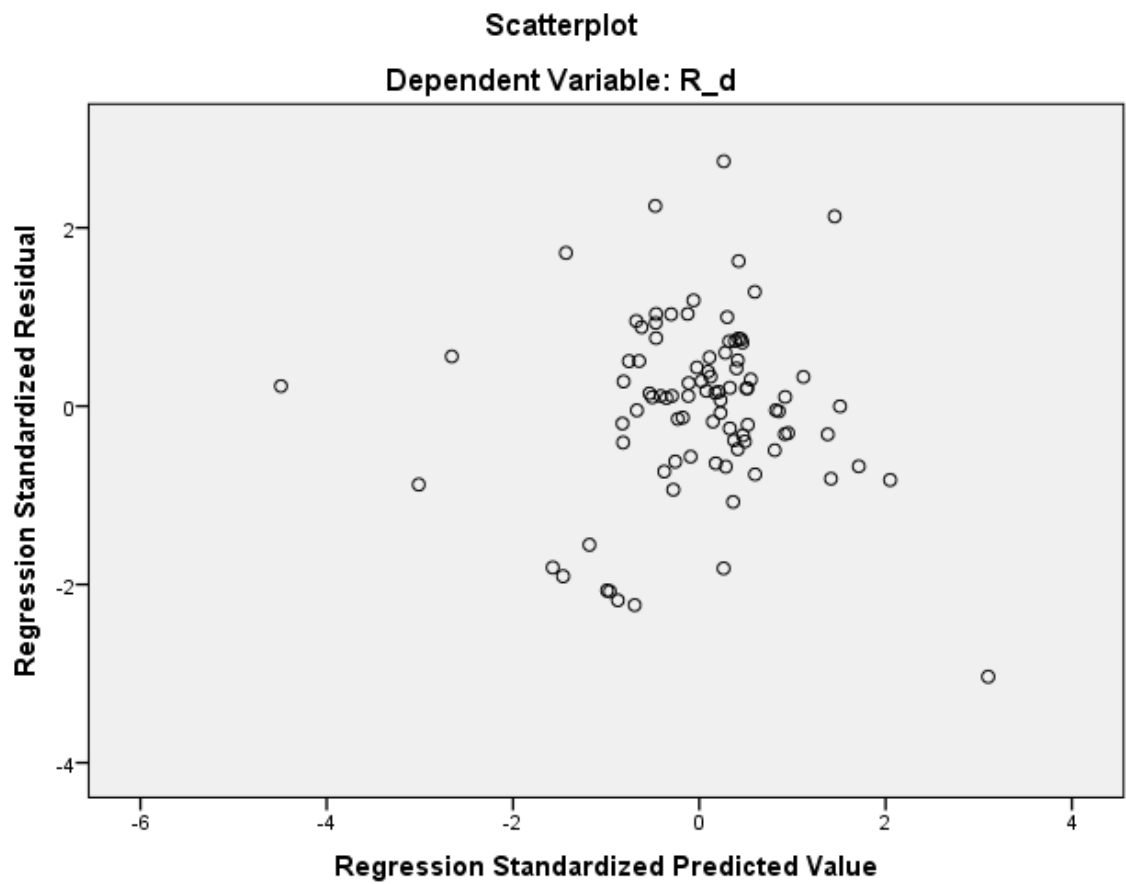
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91

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

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	Weight	<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
		/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	00:00:00.20
	Elapsed Time	00:00:00.20
	Memory Required	6080 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_5	
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).
2	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: SMSP\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.682 <sup>a</sup>	.465	.459	.05647960211 4532
2	.725 <sup>b</sup>	.526	.515	.05343804021 5947
3	.755 <sup>c</sup>	.570	.556	.05116550526 5364

a. Predictors: (Constant), AvgPL\_d

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

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

d. Dependent Variable: SMSP\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.246	1	.246	77.207	.000 <sup>b</sup>
	Residual	.284	89	.003		
	Total	.530	90			
2	Regression	.279	2	.139	48.833	.000 <sup>c</sup>
	Residual	.251	88	.003		
	Total	.530	90			
3	Regression	.302	3	.101	38.508	.000 <sup>d</sup>
	Residual	.228	87	.003		

Total	.530	90			
-------	------	----	--	--	--

a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), AvgPL\_d

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

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.086	.013		-6.862	.000
	AvgPL_d	8.810	1.003	.682	8.787	.000
2	(Constant)	-.066	.013		-5.012	.000
	AvgPL_d	13.890	1.778	1.075	7.814	.000
	GD_d	-6.873	2.034	-.465	-3.379	.001
3	(Constant)	.015	.030		.491	.625
	AvgPL_d	19.027	2.415	1.472	7.879	.000
	GD_d	-6.147	1.962	-.416	-3.133	.002
	AvgGL_d	-13.208	4.405	-.488	-2.998	.004

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_d	1.000	1.000
2	(Constant)		
	AvgPL_d	.285	3.511
	GD_d	.285	3.511
3	(Constant)		
	AvgPL_d	.141	7.068
	GD_d	.280	3.565
	AvgGL_d	.187	5.354

a. Dependent Variable: SMSP\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.465 <sup>b</sup>	-3.379	.001	-.339	.285	3.511
	Tpaths_d	-.017 <sup>b</sup>	-.128	.899	-.014	.345	2.897
	TSpaths_d	-.136 <sup>b</sup>	-1.461	.148	-.154	.681	1.468
	AvgGL_d	-.550 <sup>b</sup>	-3.252	.002	-.328	.190	5.273

2	Tpaths_d	-.041 <sup>c</sup>	-.329	.743	-.035	.344	2.907
	TSpaths_d	-.130 <sup>c</sup>	-1.467	.146	-.155	.681	1.469
	AvgGL_d	-.488 <sup>c</sup>	-2.998	.004	-.306	.187	5.354
3	Tpaths_d	.136 <sup>d</sup>	1.027	.307	.110	.282	3.548
	TSpaths_d	.018 <sup>d</sup>	.174	.862	.019	.470	2.127

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

Model	Collinearity Statistics	
	Minimum Tolerance	
1	GD_d	.285
	Tpaths_d	.345
	TSpaths_d	.681
	AvgGL_d	.190
2	Tpaths_d	.176
	TSpaths_d	.254
	AvgGL_d	.141
3	Tpaths_d	.131
	TSpaths_d	.129

a. Dependent Variable: SMSP\_d

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

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

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



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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgPL_d	GD_d
1	1	1.881	1.000	.06	.06	
	2	.119	3.974	.94	.94	
2	1	2.836	1.000	.02	.01	.01
	2	.133	4.612	.90	.12	.03
	3	.030	9.644	.08	.88	.96
3	1	3.821	1.000	.00	.00	.00
	2	.138	5.262	.13	.07	.05
	3	.033	10.761	.00	.30	.95
	4	.008	22.375	.87	.63	.00

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

Model	Dimension	Variance Proportions
		AvgGL_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.00
	3	.02
	4	.97

a. Dependent Variable: SMSP\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .03633873909 7118	.33855581283 5693	.01098901098 9011	.05796868096 6299
Std. Predicted Value	-.816	5.651	.000	1.000
Standard Error of Predicted Value	.006	.031	.010	.005
Adjusted Predicted Value	- .04154562205 0762	.32810547947 8836	.01020616170 6738	.05576714905 8079
Residual	- .24168722331 5239	.34399494528 7704	.00000000000 0000	.05030551955 8904
Std. Residual	-4.724	6.723	.000	.983
Stud. Residual	-5.394	7.961	.007	1.121

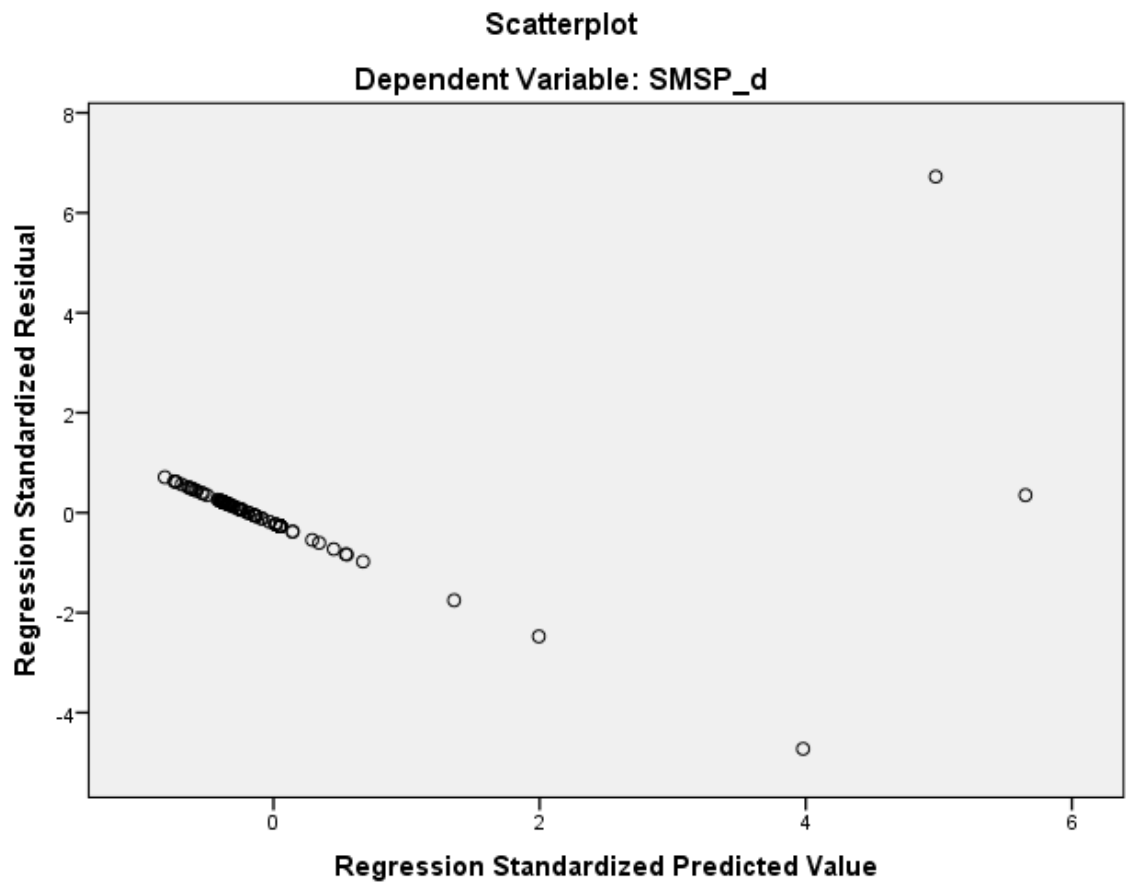
Deleted Residual	- .31515488028 5263	.48237925767 8986	.00078284928 2273	.06576108331 1082
Stud. Deleted Residual	-6.574	15.193	.072	1.809
Mahal. Distance	.153	32.126	2.967	5.099
Cook's Distance	.000	6.375	.098	.705
Centered Leverage Value	.002	.357	.033	.057

**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_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		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 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	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	AvgPL_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	.489 <sup>a</sup>	.239	.230	.00368945229 7106

2	.696 <sup>b</sup>	.485	.472	.00305451119 4323
---	-------------------	------	------	----------------------

a. Predictors: (Constant), TSpaths\_d

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

c. Dependent Variable: S\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	27.042	.000 <sup>b</sup>
	Residual	.001	86	.000		
	Total	.002	87			
2	Regression	.001	2	.000	39.961	.000 <sup>c</sup>
	Residual	.001	85	.000		
	Total	.002	87			

a. Dependent Variable: S\_d

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)	.026	.003		8.930	.000
	TSpaths_d	-1.352	.260	-.489	-5.200	.000
2	(Constant)	.028	.002		11.700	.000
	TSpaths_d	-2.354	.267	-.851	-8.825	.000
	AvgPL_d	.830	.131	.614	6.362	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_d	1.000	1.000
2	(Constant)		
	TSpaths_d	.651	1.535
	AvgPL_d	.651	1.535

a. Dependent Variable: S\_d

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

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

					Correlation	Tolerance	VIF
1	GD_d	.449 <sup>b</sup>	4.951	.000	.473	.846	1.182
	Tpaths_d	2.246 <sup>b</sup>	5.550	.000	.516	.040	24.934
	AvgPL_d	.614 <sup>b</sup>	6.362	.000	.568	.651	1.535
	AvgGL_d	.559 <sup>b</sup>	4.787	.000	.461	.517	1.935
2	GD_d	.102 <sup>c</sup>	.792	.430	.086	.370	2.706
	Tpaths_d	.445 <sup>c</sup>	.578	.565	.063	.010	96.929
	AvgGL_d	.023 <sup>c</sup>	.124	.902	.014	.186	5.365

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.846
	Tpaths_d	.040
	AvgPL_d	.651
	AvgGL_d	.517
2	GD_d	.285
	Tpaths_d	.010
	AvgGL_d	.186

a. Dependent Variable: S\_d

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 Index	Variance Proportions		
				(Constant)	TSpaths_d	AvgPL_d
1	1	1.990	1.000	.00	.00	
	2	.010	14.473	1.00	1.00	
2	1	2.945	1.000	.00	.00	.01
	2	.048	7.859	.12	.02	.75
	3	.008	19.718	.88	.98	.24

a. Dependent Variable: S\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00540872802 9579	.01653245091 4383	.01080704444 7724	.00292764091 1908
Std. Predicted Value	-5.539	1.956	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	- .00858302414 4173	.01736112497 7469	.01077927842 5180	.00318552777 0287

Residual	- .00568684050 8133	.01233510393 6493	.00000000000 0000	.00301919773 9373
Std. Residual	-1.862	4.038	.000	.988
Stud. Residual	-1.877	4.104	.004	1.015
Deleted Residual	- .00577882258 2215	.01273819711 0593	.00002776602 2544	.00319878122 2530
Stud. Deleted Residual	-1.906	4.556	.009	1.045
Mahal. Distance	.009	30.688	1.977	4.369
Cook's Distance	.000	.989	.022	.108
Centered Leverage Value	.000	.353	.023	.050

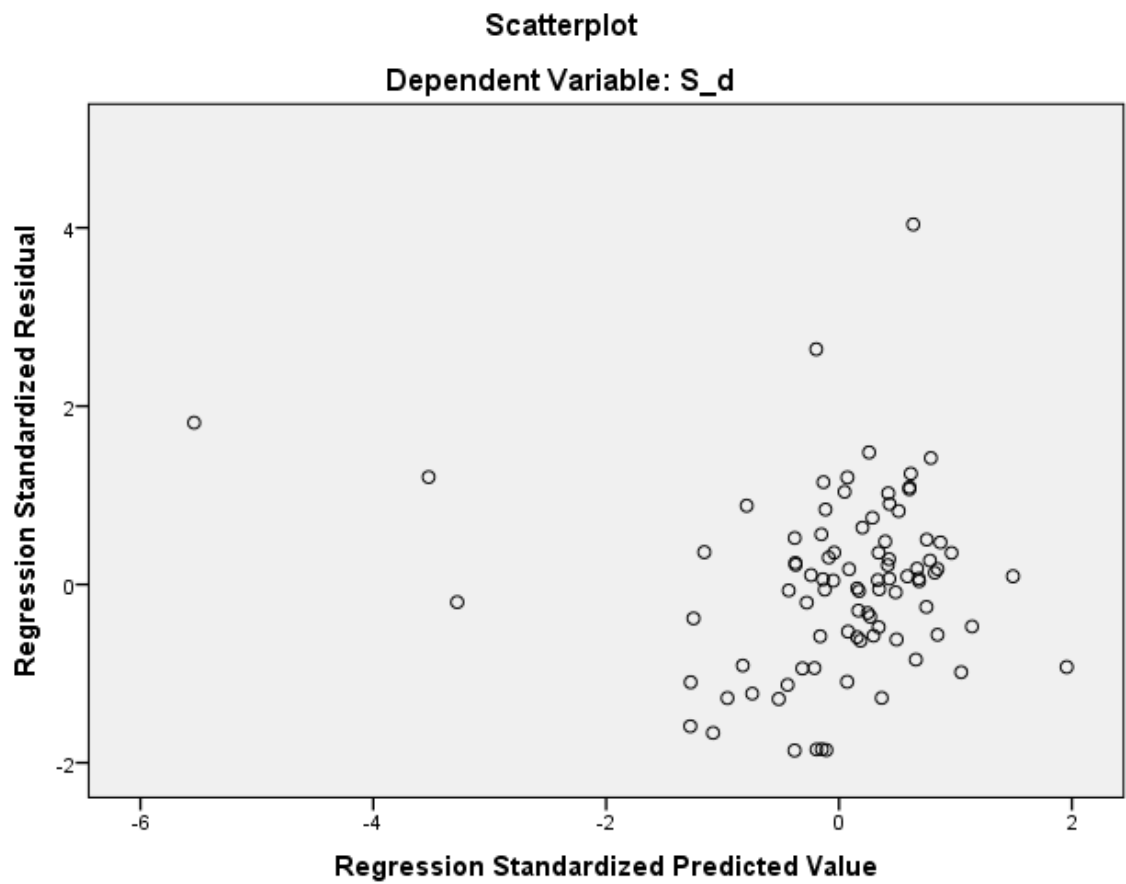
#### Residuals Statistics<sup>a</sup>

	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: S\_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 TSpaths\_d AvgPL\_d AvgGL\_d

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

/SAVE COOK.

## Regression

### Notes

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	DataSet6

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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 SMSP_d  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.07
	Memory Required	6160 bytes

	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_7	Cook's Distance

### Warnings

The dependent variable SMSP\_d is constant and has been deleted. Statistics cannot be computed.

### 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

Output Created		06-JUN-2015 11:10:21
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 GD_d  /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		00:00:00.21
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	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_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).

a. Dependent Variable: GD\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452 <sup>a</sup>	.204	.195	.00465538259 4778
2	.617 <sup>b</sup>	.381	.367	.00412869023 8359

a. Predictors: (Constant), PL\_TpdN

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

c. Dependent Variable: GD\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	22.832	.000 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	27.092	.000 <sup>c</sup>
	Residual	.002	88	.000		
	Total	.002	90			

a. Dependent Variable: GD\_d

b. Predictors: (Constant), PL\_TpdN

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.005	.001		3.532	.001

	PL_TpdN	.558	.117	.452	4.778	.000
2	(Constant)	.005	.001		3.975	.000
	PL_TpdN	.531	.104	.429	5.114	.000
	SMSP_d	.028	.006	.421	5.016	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpdN	1.000	1.000
2	(Constant)		
	PL_TpdN	.997	1.003
	SMSP_d	.997	1.003

a. Dependent Variable: GD\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpdN	.095 <sup>b</sup>	.711	.479	.076	.507	1.972
	S_d	.063 <sup>b</sup>	.603	.548	.064	.831	1.203
	R_d	.222 <sup>b</sup>	1.797	.076	.188	.571	1.753

	SMSP_d	.421 <sup>b</sup>	5.016	.000	.471	.997	1.003
2	PL_TSpdN	.087 <sup>c</sup>	.734	.465	.078	.507	1.972
	S_d	-.166 <sup>c</sup>	-1.643	.104	-.174	.678	1.475
	R_d	.052 <sup>c</sup>	.441	.660	.047	.514	1.946

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpdN	.507
	S_d	.831
	R_d	.571
	SMSP_d	.997
2	PL_TSpdN	.507
	S_d	.678
	R_d	.514

a. Dependent Variable: GD\_d

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

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

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

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

			Index	(Constant)	PL_TpdN	SMSP_d
1	1	1.935	1.000	.03	.03	
	2	.065	5.446	.97	.97	
2	1	1.979	1.000	.03	.03	.02
	2	.956	1.439	.00	.00	.98
	3	.065	5.510	.97	.97	.00

a. Dependent Variable: GD\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00484358705 5802	.03002209030 0918	.01098901098 9011	.00320352326 2347
Std. Predicted Value	-1.918	5.941	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00402235239 7442	.04019778221 8456	.01107125892 0800	.00393735264 3386
Residual	- .00721969455 4806	.01783381216 2280	.00000000000 0000	.00408255817 3254
Std. Residual	-1.749	4.319	.000	.989
Stud. Residual	-1.823	4.386	-.005	1.015

Deleted Residual	- .01329195220 0234	.01838624104 8574	- .00008224793 1789	.00443054198 5188
Stud. Deleted Residual	-1.848	4.933	.002	1.048
Mahal. Distance	.021	67.911	1.978	7.532
Cook's Distance	.000	2.645	.040	.279
Centered Leverage Value	.000	.755	.022	.084

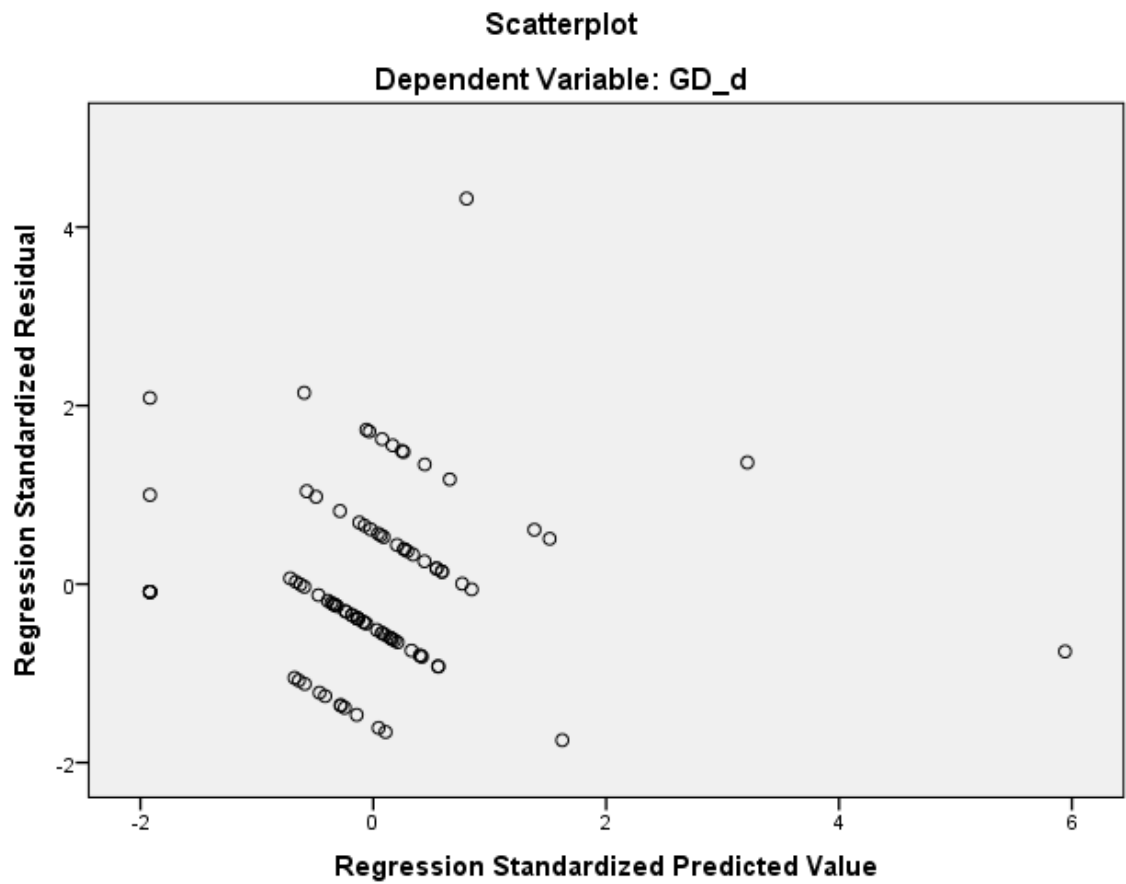
**Residuals Statistics<sup>a</sup>**

	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.

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## 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 Tpaths_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
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	Elapsed Time	00:00:00.23
	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	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	S_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	R_d		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	.546 <sup>a</sup>	.298	.290	.00170005276 8681
2	.649 <sup>b</sup>	.421	.408	.00155242889 8095
3	.681 <sup>c</sup>	.464	.446	.00150178103 4162

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, S\_d

c. Predictors: (Constant), SMSP\_d, S\_d, R\_d

d. Dependent Variable: Tpaths\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	37.740	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	31.995	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	25.138	.000 <sup>d</sup>

Residual	.000	87	.000		
Total	.000	90			

a. Dependent Variable: Tpaths\_d

b. Predictors: (Constant), SMSP\_d

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

d. Predictors: (Constant), SMSP\_d, S\_d, R\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		60.157	.000
	SMSP_d	.014	.002	.546	6.143	.000
2	(Constant)	.013	.000		28.214	.000
	SMSP_d	.019	.002	.705	7.914	.000
	S_d	-.168	.039	-.385	-4.328	.000
3	(Constant)	-.011	.009		-1.207	.231
	SMSP_d	.019	.002	.736	8.462	.000
	S_d	-.309	.065	-.707	-4.752	.000
	R_d	2.252	.849	.374	2.652	.009

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.830	1.205
	S_d	.830	1.205
3	(Constant)		
	SMSP_d	.815	1.227
	S_d	.278	3.597
	R_d	.310	3.225

a. Dependent Variable: Tpaths\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	-.026 <sup>b</sup>	-.293	.770	-.031	.997	1.003
	PL_TSpdN	-.084 <sup>b</sup>	-.942	.349	-.100	.998	1.002
	S_d	-.385 <sup>b</sup>	-4.328	.000	-.419	.830	1.205

	R_d	-.172 <sup>b</sup>	-1.894	.062	-.198	.926	1.080
2	PL_TpdN	.152 <sup>c</sup>	1.709	.091	.180	.815	1.227
	PL_TSpdN	.094 <sup>c</sup>	1.036	.303	.110	.794	1.260
	R_d	.374 <sup>c</sup>	2.652	.009	.274	.310	3.225
3	PL_TpdN	.019 <sup>d</sup>	.169	.867	.018	.513	1.948
	PL_TSpdN	-.035 <sup>d</sup>	-.341	.734	-.037	.584	1.713

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	.997
	PL_TSpdN	.998
	S_d	.830
	R_d	.926
2	PL_TpdN	.678
	PL_TSpdN	.660
	R_d	.278
3	PL_TpdN	.195
	PL_TSpdN	.228

a. Dependent Variable: Tpaths\_d

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

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



d. Predictors in the Model: (Constant), SMSP\_d, S\_d, R\_d

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	S_d
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	2.015	1.000	.03	.03	.03
	2	.920	1.480	.01	.80	.00
	3	.065	5.554	.96	.17	.97
3	1	2.960	1.000	.00	.01	.00
	2	.959	1.757	.00	.79	.00
	3	.080	6.071	.00	.18	.35
	4	.000	140.025	1.00	.02	.65

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

Model	Dimension	Variance Proportions
		R_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.00
	3	.00
	4	1.00

a. Dependent Variable: Tpaths\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00821748003 3636	.01997848413 8846	.01098901098 9011	.00137471541 0738
Std. Predicted Value	-2.016	6.539	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00762945413 5895	.02533431537 4494	.01102501321 4483	.00179075305 3205
Residual	- .00162707280 8333	.00459279632 1958	.00000000000 0000	.00147653921 9058
Std. Residual	-1.083	3.058	.000	.983
Stud. Residual	-2.244	3.118	-.006	1.033
Deleted Residual	- .00698290392 7565	.00477538956 3292	- .00003600222 5472	.00172443155 3121

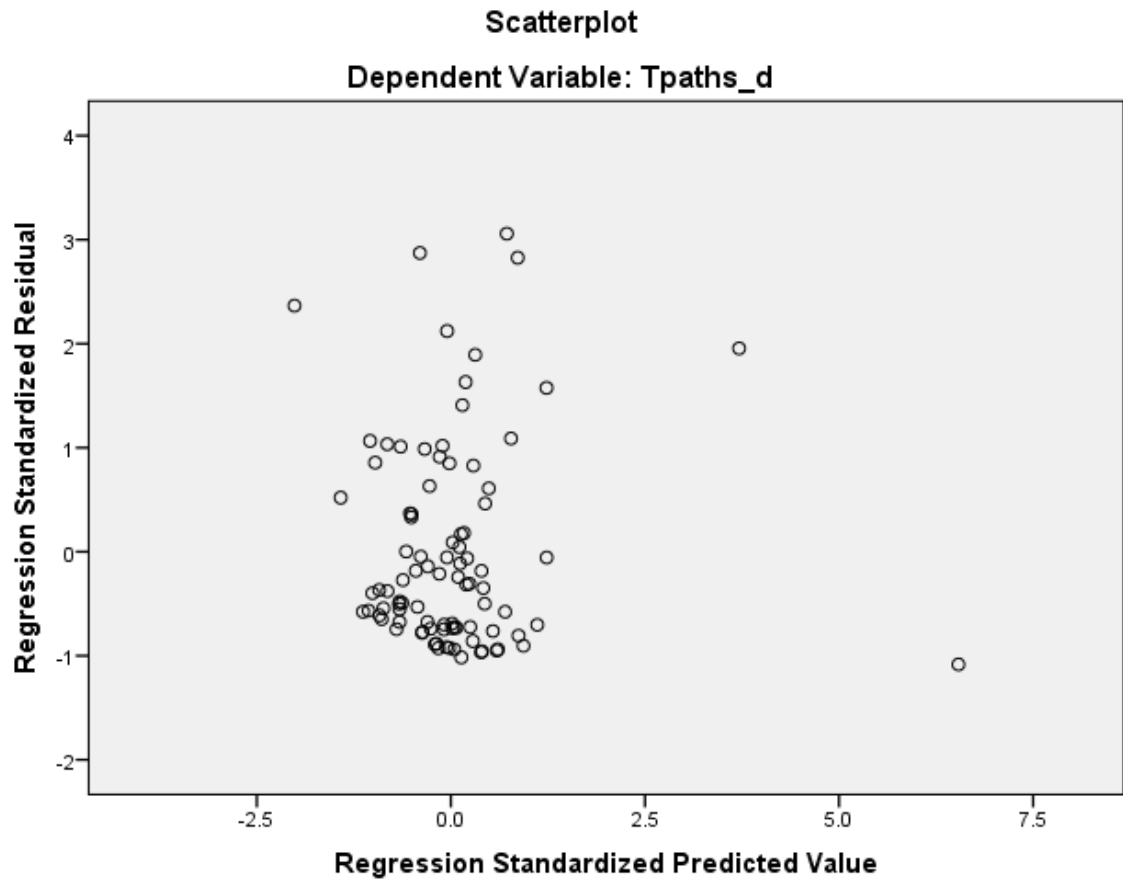
Stud. Deleted Residual	-2.299	3.290	.002	1.055
Mahal. Distance	.030	68.040	2.967	7.503
Cook's Distance	.000	4.146	.062	.436
Centered Leverage Value	.000	.756	.033	.083

**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: 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\_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.
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Resources	Processor Time		00:00:00.16
	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	S_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).
3	R_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: TSpats\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.319 <sup>a</sup>	.102	.092	.00151118396 0179
2	.564 <sup>b</sup>	.318	.303	.00132418274 8353
3	.599 <sup>c</sup>	.359	.337	.00129143541 3053

a. Predictors: (Constant), S\_d

b. Predictors: (Constant), S\_d, SMSP\_d

c. Predictors: (Constant), S\_d, SMSP\_d, R\_d

d. Dependent Variable: TSpaths\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	10.105	.002 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	20.536	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	16.234	.000 <sup>d</sup>



Residual	.000	87	.000		
Total	.000	90			

a. Dependent Variable: TSpaths\_d

b. Predictors: (Constant), S\_d

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

d. Predictors: (Constant), S\_d, SMSP\_d, R\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		29.700	.000
	S_d	-.110	.034	-.319	-3.179	.002
2	(Constant)	.013	.000		33.698	.000
	S_d	-.182	.033	-.530	-5.484	.000
	SMSP_d	.011	.002	.510	5.283	.000
3	(Constant)	-.005	.008		-.638	.525
	S_d	-.289	.056	-.842	-5.170	.000
	SMSP_d	.011	.002	.540	5.683	.000
	R_d	1.715	.730	.362	2.349	.021

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	S_d	1.000	1.000
2	(Constant)		
	S_d	.830	1.205
	SMSP_d	.830	1.205
3	(Constant)		
	S_d	.278	3.597
	SMSP_d	.815	1.227
	R_d	.310	3.225

a. Dependent Variable: TSpaths\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	.004 <sup>b</sup>	.040	.968	.004	.831	1.203
	PL_TSpdN	.026 <sup>b</sup>	.230	.819	.024	.815	1.228
	R_d	.245 <sup>b</sup>	1.376	.172	.145	.316	3.167

	SMSP_d	.510 <sup>b</sup>	5.283	.000	.491	.830	1.205
2	PL_TpdN	.077 <sup>c</sup>	.792	.430	.085	.815	1.227
	PL_TSpdN	.110 <sup>c</sup>	1.120	.266	.119	.794	1.260
	R_d	.362 <sup>c</sup>	2.349	.021	.244	.310	3.225
3	PL_TpdN	-.093 <sup>d</sup>	-.773	.442	-.083	.513	1.948
	PL_TSpdN	-.008 <sup>d</sup>	-.072	.943	-.008	.584	1.713

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	.831
	PL_TSpdN	.815
	R_d	.316
	SMSP_d	.830
2	PL_TpdN	.678
	PL_TSpdN	.660
	R_d	.278
3	PL_TpdN	.195
	PL_TSpdN	.228

a. Dependent Variable: TSpdN\_d

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

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

d. Predictors in the Model: (Constant), S\_d, SMSP\_d, R\_d

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	S_d	SMSP_d
1	1	1.923	1.000	.04	.04	
	2	.077	4.982	.96	.96	
2	1	2.015	1.000	.03	.03	.03
	2	.920	1.480	.01	.00	.80
	3	.065	5.554	.96	.97	.17
3	1	2.960	1.000	.00	.00	.01
	2	.959	1.757	.00	.00	.79
	3	.080	6.071	.00	.35	.18
	4	.000	140.025	1.00	.65	.02

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		R_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.00
	3	.00
	4	1.00

a. Dependent Variable: TSpaths\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00816451106 2205	.01468125544 4884	.01098901098 9011	.00094999820 4135
Std. Predicted Value	-2.973	3.887	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00761654321 1043	.01498204283 4163	.01097942542 6569	.00097270650 6397
Residual	- .00140173977 7066	.00487296562 6419	.00000000000 0000	.00126972907 0269
Std. Residual	-1.085	3.773	.000	.983
Stud. Residual	-1.096	3.848	.004	1.009
Deleted Residual	- .00142861483 6186	.00506669748 5745	.00000958556 2442	.00133983214 8189

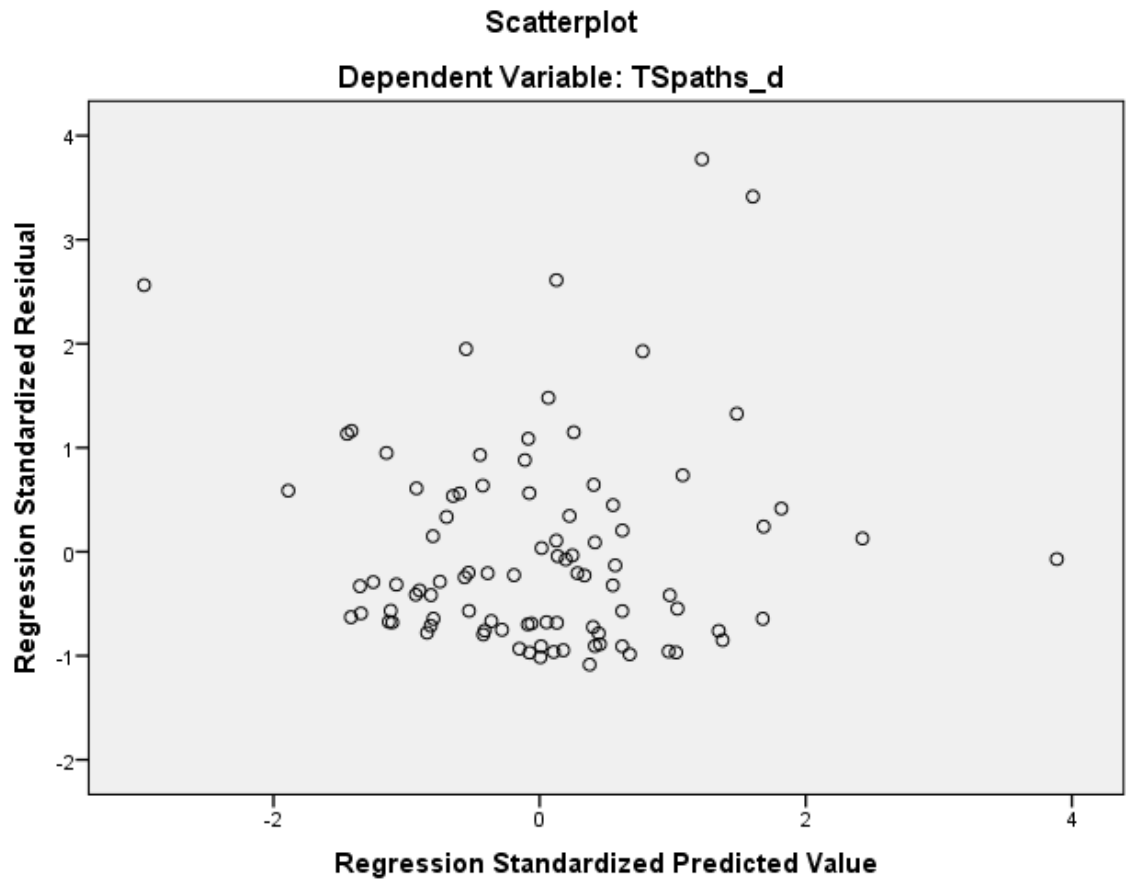
Stud. Deleted Residual	-1.097	4.199	.015	1.043
Mahal. Distance	.030	68.040	2.967	7.503
Cook's Distance	.000	.332	.014	.050
Centered Leverage Value	.000	.756	.033	.083

**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: 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\_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 AvgPL_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time		00:00:00.27
	Elapsed Time		00:00:00.26
	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	SMSP_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).
3	S_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgPL\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682 <sup>a</sup>	.465	.459	.004369269597991
2	.715 <sup>b</sup>	.512	.501	.004195777374778
3	.730 <sup>c</sup>	.534	.517	.004124558704396

a. Predictors: (Constant), SMSP\_d

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

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

d. Dependent Variable: AvgPL\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	77.207	.000 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.003	90			
2	Regression	.002	2	.001	46.118	.000 <sup>c</sup>
	Residual	.002	88	.000		
	Total	.003	90			
3	Regression	.002	3	.001	33.171	.000 <sup>d</sup>

Residual	.001	87	.000		
Total	.003	90			

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), SMSP\_d

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

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.010	.000		22.495	.000
	SMSP_d	.053	.006	.682	8.787	.000
2	(Constant)	.007	.001		5.684	.000
	SMSP_d	.052	.006	.670	8.982	.000
	PL_TpdN	.308	.105	.218	2.918	.004
3	(Constant)	.008	.001		6.027	.000
	SMSP_d	.057	.006	.740	9.118	.000
	PL_TpdN	.407	.115	.288	3.545	.001
	S_d	-.230	.114	-.179	-2.016	.047

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.997	1.003
	PL_TpdN	.997	1.003
3	(Constant)		
	SMSP_d	.814	1.229
	PL_TpdN	.815	1.227
	S_d	.678	1.475

a. Dependent Variable: AvgPL\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	.218 <sup>b</sup>	2.918	.004	.297	.997	1.003
	PL_TSpdN	.110 <sup>b</sup>	1.421	.159	.150	.998	1.002
	S_d	-.044 <sup>b</sup>	-.520	.604	-.055	.830	1.205

	R_d	.081 <sup>b</sup>	1.004	.318	.106	.926	1.080
2	PL_TSpdN	-.084 <sup>c</sup>	-.805	.423	-.086	.507	1.972
	S_d	-.179 <sup>c</sup>	-2.016	.047	-.211	.678	1.475
	R_d	-.126 <sup>c</sup>	-1.212	.229	-.129	.514	1.946
3	PL_TSpdN	-.038 <sup>d</sup>	-.353	.725	-.038	.479	2.089
	R_d	.096 <sup>d</sup>	.578	.565	.062	.195	5.118

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	.997
	PL_TSpdN	.998
	S_d	.830
	R_d	.926
2	PL_TSpdN	.507
	S_d	.678
	R_d	.514
3	PL_TSpdN	.479
	R_d	.195

a. Dependent Variable: AvgPL\_d

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

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

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

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	PL_TpdN
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	1.979	1.000	.03	.02	.03
	2	.956	1.439	.00	.98	.00
	3	.065	5.510	.97	.00	.97
3	1	2.910	1.000	.01	.01	.01
	2	.956	1.745	.00	.79	.00
	3	.071	6.422	.00	.13	.70
	4	.063	6.775	.99	.06	.28

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		S_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.01
	2	.00
	3	.72
	4	.26

a. Dependent Variable: AvgPL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00602138927 2064	.04411741346 1208	.01098901098 9011	.00433709382 8651
Std. Predicted Value	-1.145	7.638	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00520300166 6814	.06460727006 1970	.01113171489 4946	.00611359896 6983
Residual	- .00637209787 9648	.02201568707 8238	.00000000000 0000	.00405523345 2689
Std. Residual	-1.545	5.338	.000	.983
Stud. Residual	-3.133	5.622	-.008	1.067
Deleted Residual	- .02673407830 2979	.02442658506 3338	- .00014270390 5935	.00521272065 6212



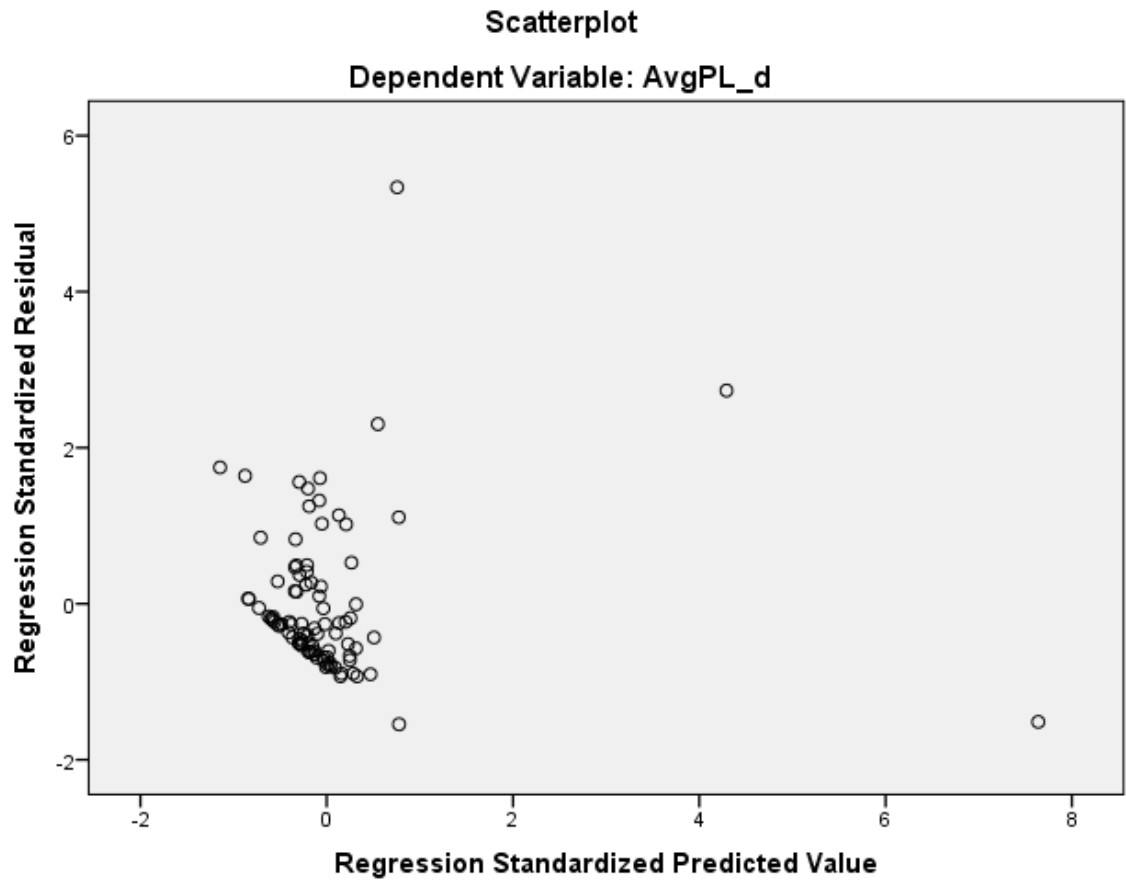
Stud. Deleted Residual	-3.307	7.006	.009	1.168
Mahal. Distance	.033	67.990	2.967	7.624
Cook's Distance	.000	8.050	.114	.850
Centered Leverage Value	.000	.755	.033	.085

**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	06-JUN-2015 11:11:46	
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.

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 AvgGL_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.25
	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	SMSP_d		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	.509 <sup>a</sup>	.259	.251	.00245195994 2763

a. Predictors: (Constant), SMSP\_d

b. Dependent Variable: AvgGL\_d

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

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

1	Regression	.000	1	.000	31.148	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: AvgGL\_d

b. Predictors: (Constant), SMSP\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		41.521	.000
	SMSP_d	.019	.003	.509	5.581	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	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_TpdN	.142 <sup>b</sup>	1.566	.121	.165	.997	1.003
	PL_TSpdN	.167 <sup>b</sup>	1.851	.068	.194	.998	1.002
	S_d	-.125 <sup>b</sup>	-1.251	.214	-.132	.830	1.205
	R_d	-.006 <sup>b</sup>	-.067	.947	-.007	.926	1.080

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpdN	.997	
	PL_TSpdN	.998	
	S_d	.830	
	R_d	.926	

a. Dependent Variable: AvgGL\_d

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

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

Model	Dimension	Eigenvalue	Condition	Variance Proportions
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		Index	(Constant)	SMSP_d
1	1	1.142	1.000	.43
	2	.858	1.154	.57

a. Dependent Variable: AvgGL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01078248862 1771	.02287600189 4474	.01098901098 9011	.00144246071 4023
Std. Predicted Value	-.143	8.241	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.01067263912 4095	.03074711561 2030	.01106096601 9628	.00216093890 0064
Residual	- .00241055455 9901	.00968349166 2145	.00000000000 0000	.00243829989 2505
Std. Residual	-.983	3.949	.000	.994
Stud. Residual	-2.030	3.972	-.009	1.022
Deleted Residual	- .01028166804 4627	.00979334209 1143	- .00007195503 0617	.00270733221 7786
Stud. Deleted Residual	-2.067	4.354	.001	1.052
Mahal. Distance	.020	67.910	.989	7.404



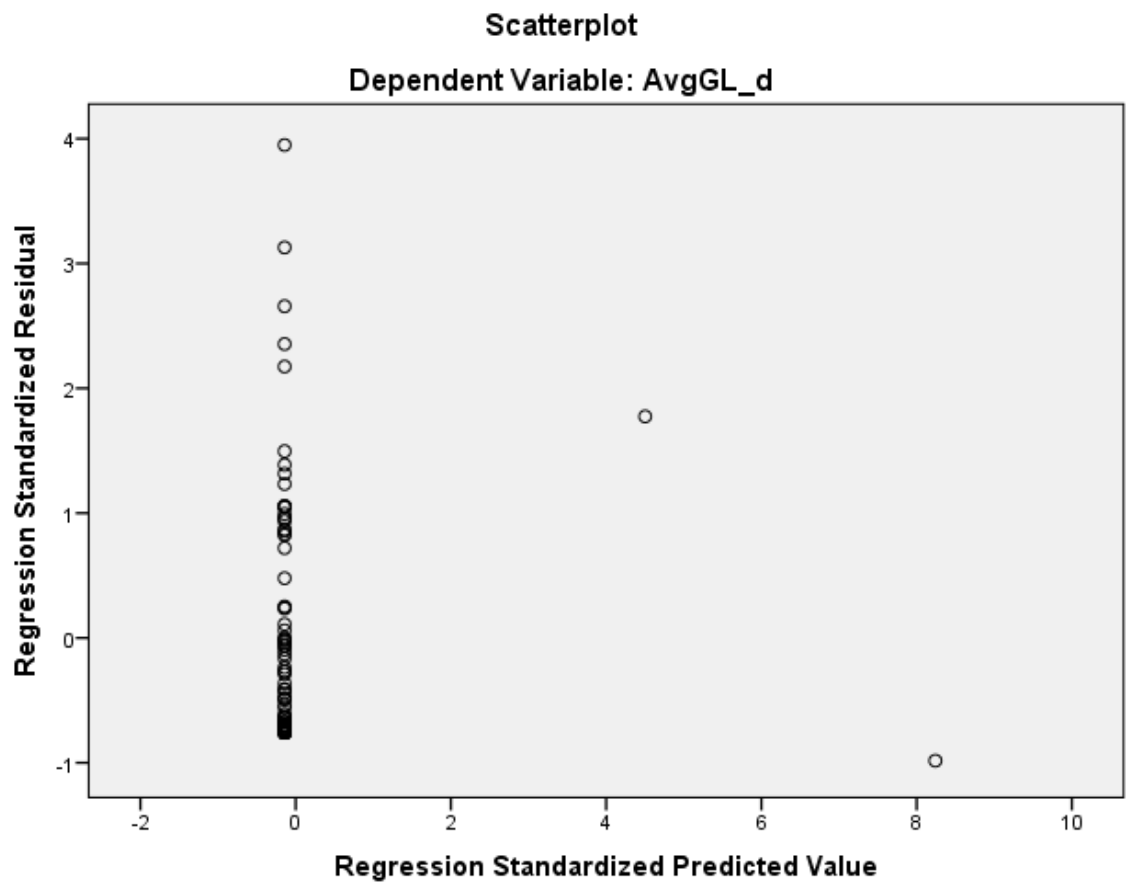
Cook's Distance	.000	6.730	.086	.707
Centered Leverage Value	.000	.755	.011	.082

#### 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 GD\_d

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

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

/SAVE COOK.

## Regression

### Notes

Output Created		06-JUN-2015 11:12:25
Comments		
Input	Active Dataset	DataSet5
	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 GD_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	00:00:00.21
	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_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).

a. Dependent Variable: GD\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.462 <sup>a</sup>	.213	.204	.00440241284 4171
2	.572 <sup>b</sup>	.327	.312	.00409461956 3375

a. Predictors: (Constant), PL\_TpdN

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

c. Dependent Variable: GD\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	23.836	.000 <sup>b</sup>
	Residual	.002	88	.000		
	Total	.002	89			
2	Regression	.001	2	.000	21.141	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			

a. Dependent Variable: GD\_d

b. Predictors: (Constant), PL\_TpdN

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.005	.001		3.762	.000

	PL_TpdN	.540	.111	.462	4.882	.000
2	(Constant)	.005	.001		3.978	.000
	PL_TpdN	.531	.103	.454	5.163	.000
	SMSP_d	.044	.012	.338	3.838	.000

**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

a. Dependent Variable: GD\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpdN	.067 <sup>b</sup>	.504	.616	.054	.508	1.968
	S_d	-.083 <sup>b</sup>	-.789	.432	-.084	.819	1.221
	R_d	.105 <sup>b</sup>	.828	.410	.088	.553	1.808

	SMSP_d	.338 <sup>b</sup>	3.838	.000	.380	1.000	1.000
2	PL_TSpdN	.118 <sup>c</sup>	.948	.346	.102	.503	1.989
	S_d	-.153 <sup>c</sup>	-1.561	.122	-.166	.794	1.260
	R_d	.072 <sup>c</sup>	.605	.547	.065	.550	1.818

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpdN	.508
	S_d	.819
	R_d	.553
	SMSP_d	1.000
2	PL_TSpdN	.503
	S_d	.794
	R_d	.550

a. Dependent Variable: GD\_d

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

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

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

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



			Index	(Constant)	PL_TpdN	SMSP_d
1	1	1.934	1.000	.03	.03	
	2	.066	5.415	.97	.97	
2	1	1.957	1.000	.03	.03	.01
	2	.977	1.416	.00	.00	.99
	3	.066	5.447	.97	.97	.00

a. Dependent Variable: GD\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00480764033 2729	.02690582908 6900	.01081215744 8929	.00282224640 0574
Std. Predicted Value	-2.128	5.702	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00398265291 0054	.01679183728 9929	.01061993878 2291	.00228800478 1192
Residual	- .00719888601 4521	.01785813271 9994	.00000000000 0000	.00404835119 0359
Std. Residual	-1.758	4.361	.000	.989
Stud. Residual	-1.833	4.428	.001	1.007

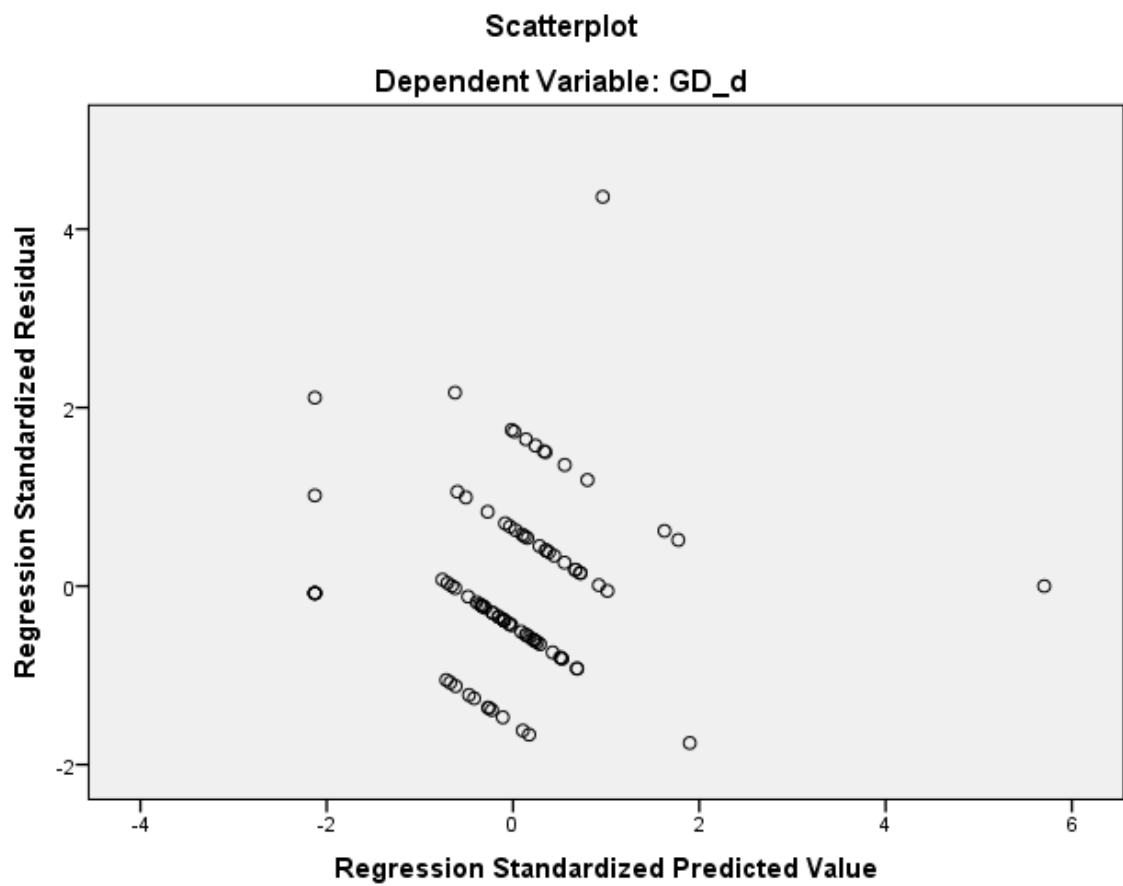
Deleted Residual	- .00782322697 3414	.01841158606 1120	.00001139088 9699	.00417855503 8123
Stud. Deleted Residual	-1.858	5.003	.009	1.043
Mahal. Distance	.012	88.011	1.978	9.375
Cook's Distance	.000	.203	.009	.029
Centered Leverage Value	.000	.989	.022	.105

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

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89
Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90
Cook's Distance	89
Centered Leverage Value	90

a. Dependent Variable: GD\_d

## Charts



```

/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

Output Created	06-JUN-2015 11:12:45	
Comments		
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	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 Tpaths_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.23
	Elapsed Time	00:00:00.23
	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	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	S_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	R_d		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	.463 <sup>a</sup>	.214	.205	.00166773468 0237
2	.592 <sup>b</sup>	.351	.336	.00152432491 2575
3	.638 <sup>c</sup>	.407	.386	.00146610317 5044

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, S\_d

c. Predictors: (Constant), SMSP\_d, S\_d, R\_d

d. Dependent Variable: Tpaths\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	23.994	.000 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			
2	Regression	.000	2	.000	23.529	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.000	89			
3	Regression	.000	3	.000	19.639	.000 <sup>d</sup>

Residual	.000	86	.000		
Total	.000	89			

a. Dependent Variable: Tpaths\_d

b. Predictors: (Constant), SMSP\_d

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

d. Predictors: (Constant), SMSP\_d, S\_d, R\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		61.183	.000
	SMSP_d	.023	.005	.463	4.898	.000
2	(Constant)	.013	.000		28.526	.000
	SMSP_d	.026	.004	.526	6.004	.000
	S_d	-.164	.038	-.375	-4.282	.000
3	(Constant)	-.012	.009		-1.366	.176
	SMSP_d	.028	.004	.554	6.530	.000
	S_d	-.310	.063	-.711	-4.892	.000
	R_d	2.354	.830	.408	2.837	.006



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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.972	1.029
	S_d	.972	1.029
3	(Constant)		
	SMSP_d	.959	1.043
	S_d	.327	3.063
	R_d	.334	2.990

a. Dependent Variable: Tpaths\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	-.028 <sup>b</sup>	-.290	.773	-.031	1.000	1.000
	PL_TSpdN	-.073 <sup>b</sup>	-.765	.446	-.082	.997	1.003
	S_d	-.375 <sup>b</sup>	-4.282	.000	-.417	.972	1.029

	R_d	-.165 <sup>b</sup>	-1.764	.081	-.186	.995	1.005
2	PL_TpdN	.160 <sup>c</sup>	1.694	.094	.180	.816	1.225
	PL_TSpdN	.118 <sup>c</sup>	1.218	.226	.130	.795	1.257
	R_d	.408 <sup>c</sup>	2.837	.006	.293	.334	2.990
3	PL_TpdN	.002 <sup>d</sup>	.014	.989	.002	.512	1.953
	PL_TSpdN	-.024 <sup>d</sup>	-.221	.825	-.024	.586	1.705

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	1.000
	PL_TSpdN	.997
	S_d	.972
	R_d	.995
2	PL_TpdN	.794
	PL_TSpdN	.775
	R_d	.327
3	PL_TpdN	.210
	PL_TSpdN	.247

a. Dependent Variable: Tpaths\_d

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

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

d. Predictors in the Model: (Constant), SMSP\_d, S\_d, R\_d

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	S_d
1	1	1.105	1.000	.45	.45	
	2	.895	1.112	.55	.55	
2	1	1.966	1.000	.03	.02	.03
	2	.965	1.427	.00	.96	.00
	3	.068	5.368	.96	.02	.97
3	1	2.936	1.000	.00	.00	.00
	2	.979	1.732	.00	.95	.00
	3	.085	5.876	.00	.03	.35
	4	.000	138.824	1.00	.01	.64

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		R_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.00
	3	.00
	4	1.00

a. Dependent Variable: Tpaths\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00826235953 7184	.01903090067 2078	.01090720654 7116	.00119286411 6501
Std. Predicted Value	-2.217	6.810	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00768091855 5707	.01270532794 2967	.01080219388 3037	.00083749510 6410
Residual	- .00148832495 3243	.00463725160 8074	.00000000000 0000	.00144118175 8801
Std. Residual	-1.015	3.163	.000	.983
Stud. Residual	-1.025	3.226	.005	1.013
Deleted Residual	- .00151704892 0505	.00482248421 7584	.00001373520 5606	.00152282164 5717

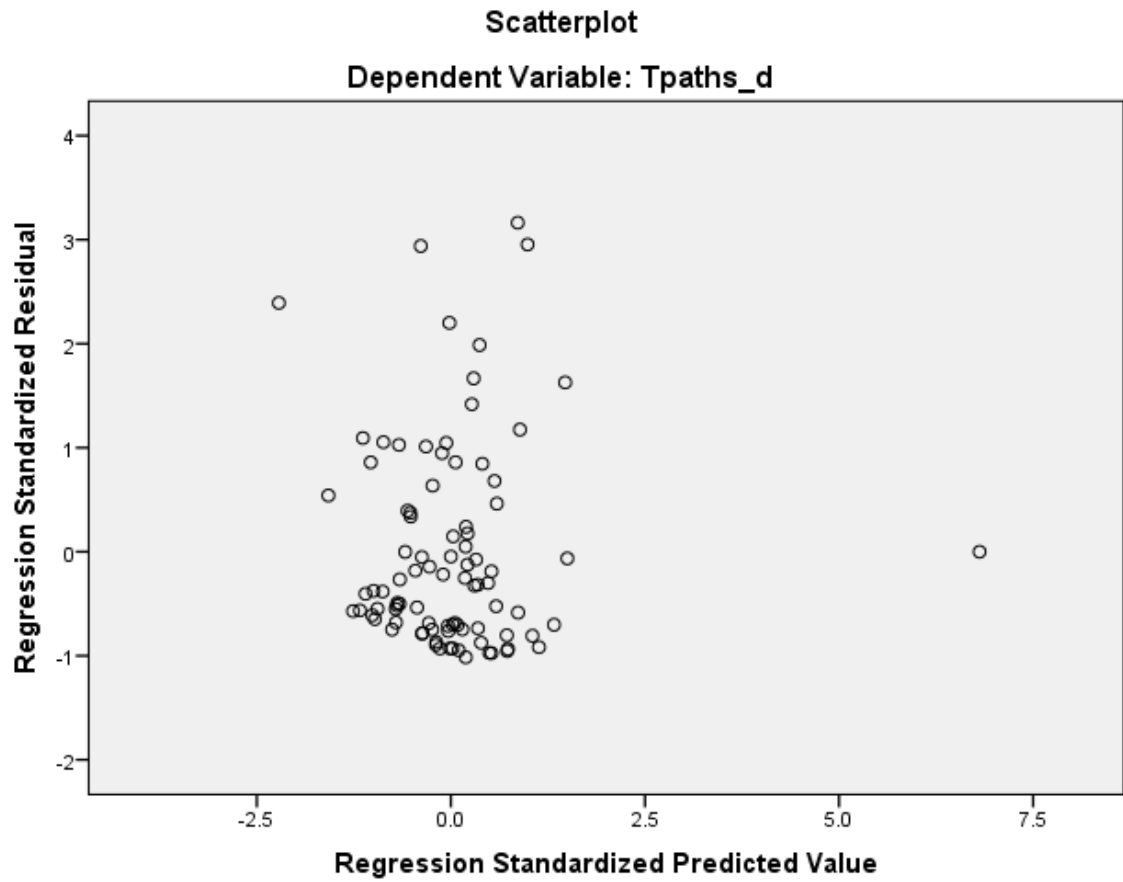
Stud. Deleted Residual	-1.025	3.420	.014	1.036
Mahal. Distance	.020	88.011	2.967	9.331
Cook's Distance	.000	.277	.013	.041
Centered Leverage Value	.000	.989	.033	.105

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

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89
Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90
Cook's Distance	89
Centered Leverage Value	90

a. Dependent Variable: Tpaths\_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.

## 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 AvgPL_d  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time		00:00:00.23
	Elapsed Time		00:00:00.24
	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	SMSP_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	.614 <sup>a</sup>	.377	.370	.00415712660 1770
2	.663 <sup>b</sup>	.439	.426	.00396753587 0348

a. Predictors: (Constant), SMSP\_d

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

c. Dependent Variable: AvgPL\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	53.316	.000 <sup>b</sup>
	Residual	.002	88	.000		
	Total	.002	89			
2	Regression	.001	2	.001	34.072	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), SMSP\_d

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

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

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

		B	Std. Error	Beta		
1	(Constant)	.010	.000		23.490	.000
	SMSP_d	.086	.012	.614	7.302	.000
2	(Constant)	.007	.001		5.946	.000
	SMSP_d	.085	.011	.609	7.580	.000
	PL_TpdN	.309	.100	.249	3.100	.003

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	1.000	1.000
	PL_TpdN	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_TpdN	.249 <sup>b</sup>	3.100	.003	.315	1.000	1.000

	PL_TSpdN	.151 <sup>b</sup>	1.815	.073	.191	.997	1.003
	S_d	-.031 <sup>b</sup>	-.364	.717	-.039	.972	1.029
	R_d	.110 <sup>b</sup>	1.314	.192	.140	.995	1.005
2	PL_TSpdN	-.049 <sup>c</sup>	-.427	.670	-.046	.503	1.989
	S_d	-.171 <sup>c</sup>	-1.922	.058	-.203	.794	1.260
	R_d	-.102 <sup>c</sup>	-.943	.348	-.101	.550	1.818

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	1.000
	PL_TSpdN	.997
	S_d	.972
	R_d	.995
2	PL_TSpdN	.503
	S_d	.794
	R_d	.550

a. Dependent Variable: AvgPL\_d

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	PL_TpdN
1	1	1.105	1.000	.45	.45	
	2	.895	1.112	.55	.55	
2	1	1.957	1.000	.03	.01	.03
	2	.977	1.416	.00	.99	.00
	3	.066	5.447	.97	.00	.97

a. Dependent Variable: AvgPL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00696295918 8968	.04087571799 7551	.01069029783 5930	.00347170012 6916
Std. Predicted Value	-1.074	8.695	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00636542169 3772	.01405645441 2639	.01032989794 8898	.00133938077 1732
Residual	- .00558555871 2482	.02424532175 0641	.00000000000 0000	.00392270351 7364
Std. Residual	-1.408	6.111	.000	.989

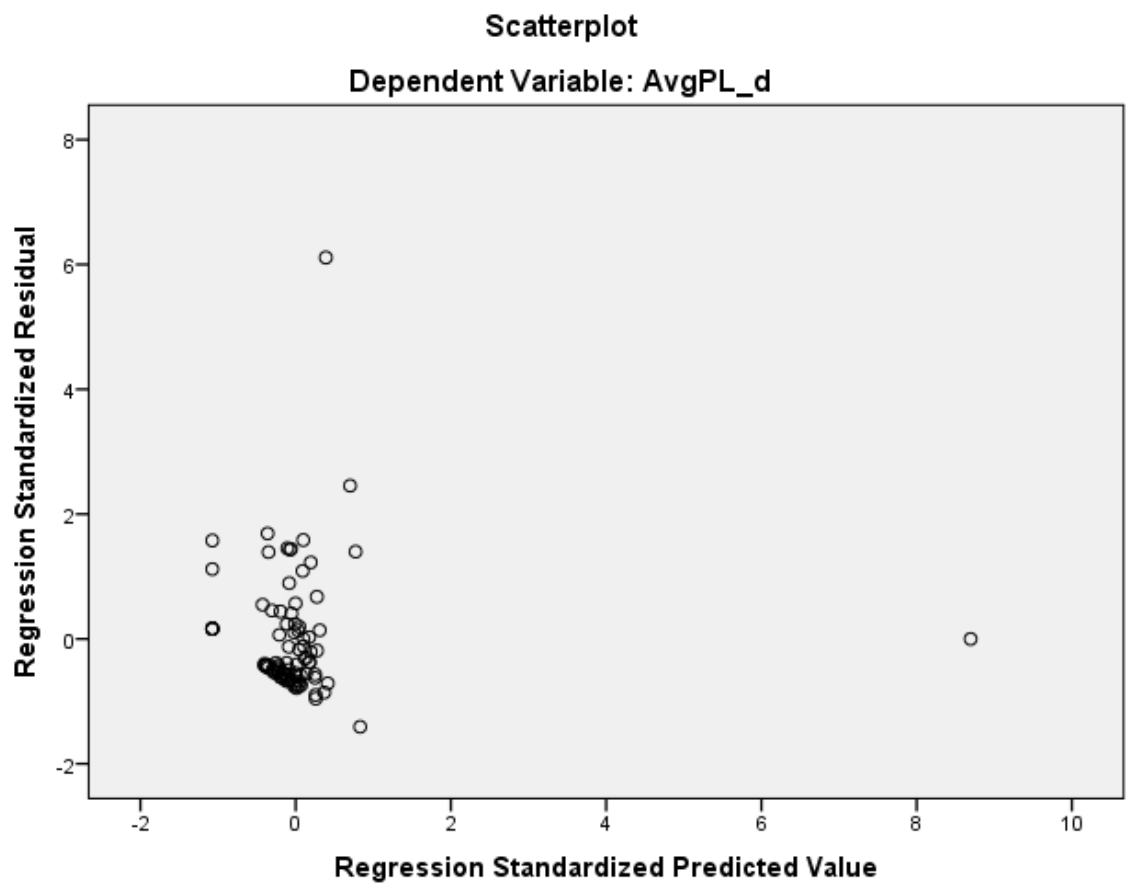
Stud. Residual	-1.468	6.205	.003	1.010
Deleted Residual	-	.02499672397	.00002123785	.00407215616
	.00606998009	9712	6016	6638
	6072			
Stud. Deleted Residual	-1.478	8.263	.029	1.168
Mahal. Distance	.012	88.011	1.978	9.375
Cook's Distance	.000	.398	.011	.046
Centered Leverage Value	.000	.989	.022	.105

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

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89
Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90
Cook's Distance	89
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 AvgGL_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>



	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_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.19
	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	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	PL_TSpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	S_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgGL\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438 <sup>a</sup>	.192	.183	.00240806658 3134
2	.481 <sup>b</sup>	.231	.213	.00236266484 0939
3	.530 <sup>c</sup>	.281	.256	.00229818642 5605

a. Predictors: (Constant), SMSP\_d

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

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

d. Dependent Variable: AvgGL\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	20.909	.000 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.001	89			
2	Regression	.000	2	.000	13.067	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.001	89			

3	Regression	.000	3	.000	11.191	.000 <sup>d</sup>
	Residual	.000	86	.000		
	Total	.001	89			

a. Dependent Variable: AvgGL\_d

b. Predictors: (Constant), SMSP\_d

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

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		42.157	.000
	SMSP_d	.031	.007	.438	4.573	.000
2	(Constant)	.009	.001		12.884	.000
	SMSP_d	.032	.007	.450	4.776	.000
	PL_TSpdN	.130	.062	.198	2.101	.039
3	(Constant)	.010	.001		12.907	.000
	SMSP_d	.035	.007	.499	5.320	.000
	PL_TSpdN	.204	.067	.310	3.026	.003
	S_d	-.157	.065	-.253	-2.439	.017

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.997	1.003
	PL_TSpdN	.997	1.003
3	(Constant)		
	SMSP_d	.950	1.052
	PL_TSpdN	.795	1.257
	S_d	.775	1.290

a. Dependent Variable: AvgGL\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpdN	.152 <sup>b</sup>	1.605	.112	.170	1.000	1.000
	PL_TSpdN	.198 <sup>b</sup>	2.101	.039	.220	.997	1.003
	S_d	-.112 <sup>b</sup>	-1.156	.251	-.123	.972	1.029

	R_d	.009 <sup>b</sup>	.092	.927	.010	.995	1.005
2	PL_TpdN	.027 <sup>c</sup>	.199	.842	.021	.504	1.984
	S_d	-.253 <sup>c</sup>	-2.439	.017	-.254	.775	1.290
	R_d	-.193 <sup>c</sup>	-1.604	.112	-.170	.598	1.672
3	PL_TpdN	.085 <sup>d</sup>	.644	.521	.070	.488	2.047
	R_d	.068 <sup>d</sup>	.366	.716	.040	.247	4.056

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpdN	1.000
	PL_TSpdN	.997
	S_d	.972
	R_d	.995
2	PL_TpdN	.503
	S_d	.775
	R_d	.598
3	PL_TpdN	.476
	R_d	.247

a. Dependent Variable: AvgGL\_d

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

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

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

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	PL_TSpdN
1	1	1.105	1.000	.45	.45	
	2	.895	1.112	.55	.55	
2	1	1.956	1.000	.03	.01	.03
	2	.983	1.411	.00	.98	.00
	3	.061	5.658	.97	.01	.97
3	1	2.885	1.000	.01	.00	.01
	2	.983	1.713	.00	.94	.00
	3	.071	6.380	.20	.05	.24
	4	.061	6.871	.79	.01	.75

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		S_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.01
	2	.00
	3	.99
	4	.00

a. Dependent Variable: AvgGL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00894653797 1497	.02183355949 8191	.01088371725 2233	.00141149553 1679
Std. Predicted Value	-1.372	7.758	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00824313983 3212	.01342140790 0751	.01075027385 7062	.00082502983 1576
Residual	- .00372167909 5179	.00848232395 9470	.00000000000 0000	.00225912092 0877
Std. Residual	-1.619	3.691	.000	.983
Stud. Residual	-1.724	3.795	.002	1.011
Deleted Residual	- .00421561021 3578	.00896735396 2362	.00001041145 7754	.00237768002 2859



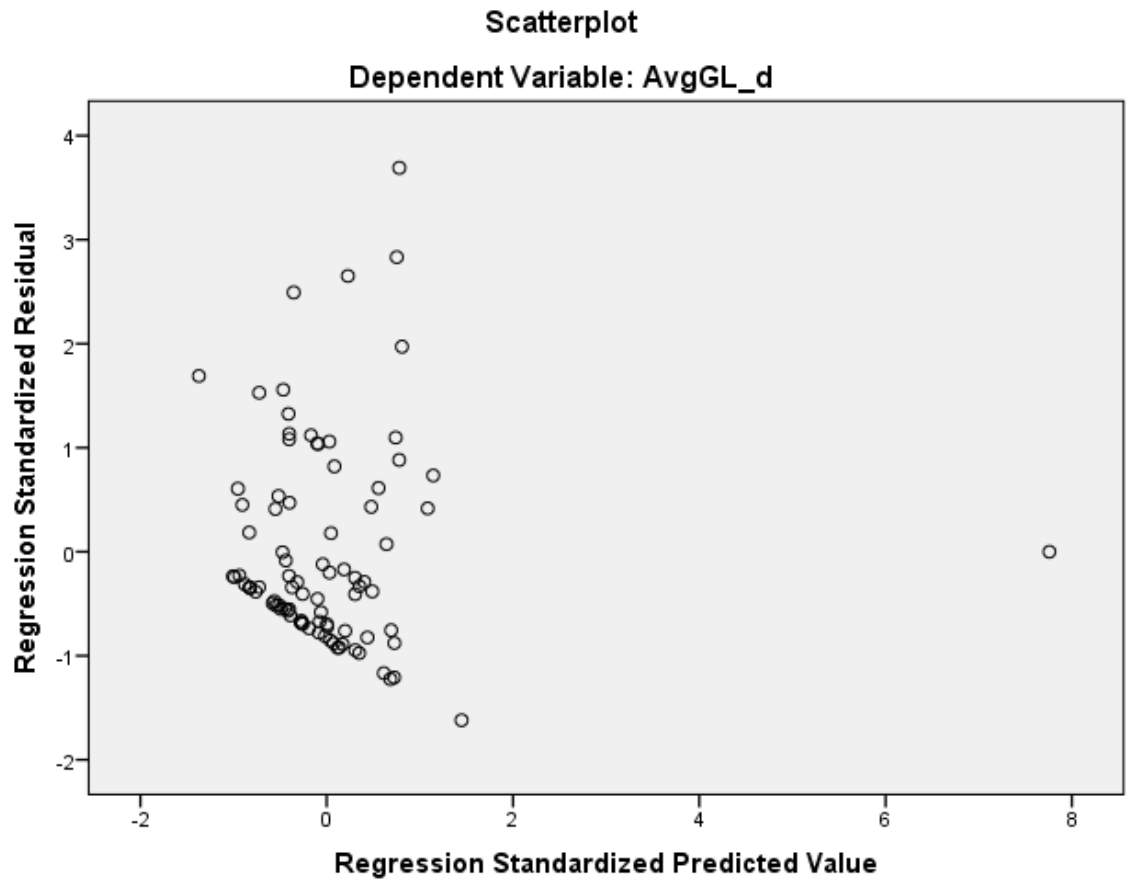
Stud. Deleted Residual	-1.744	4.135	.011	1.038
Mahal. Distance	.020	88.011	2.967	9.408
Cook's Distance	.000	.206	.012	.031
Centered Leverage Value	.000	.989	.033	.106

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

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89
Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90
Cook's Distance	89
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 ECd

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

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

/SAVE COOK.

## Regression

### Notes

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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 ECd  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03
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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 PL\_EVCdN

/METHOD=STEPWISE PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

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

/SAVE COOK.

## Regression

### Notes

Output Created	06-JUN-2015 11:27:15
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_EVCdN  /METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.25
	Elapsed Time		00:00:00.25
	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_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).

a. Dependent Variable: PL\_EVCdN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.393 <sup>a</sup>	.155	.145	.01008588375 2176
2	.478 <sup>b</sup>	.228	.211	.00969268038 9508

a. Predictors: (Constant), PL\_TpdN

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

c. Dependent Variable: PL\_EVCdN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	16.284	.000 <sup>b</sup>
	Residual	.009	89	.000		
	Total	.011	90			
2	Regression	.002	2	.001	13.000	.000 <sup>c</sup>
	Residual	.008	88	.000		
	Total	.011	90			

a. Dependent Variable: PL\_EVCdN



b. Predictors: (Constant), PL\_TpdN

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.000	.003		-.080	.936
	PL_TpdN	1.022	.253	.393	4.035	.000
2	(Constant)	.000	.003		-.088	.930
	PL_TpdN	.984	.244	.379	4.040	.000
	SMSP_d	.039	.013	.271	2.893	.005

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpdN	1.000	1.000
2	(Constant)		
	PL_TpdN	.997	1.003
	SMSP_d	.997	1.003

a. Dependent Variable: PL\_EVCdN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpdN	.140 <sup>b</sup>	1.023	.309	.108	.507	1.972
	S_d	.094 <sup>b</sup>	.878	.382	.093	.831	1.203
	R_d	.213 <sup>b</sup>	1.667	.099	.175	.571	1.753
	SMSP_d	.271 <sup>b</sup>	2.893	.005	.295	.997	1.003
2	PL_TSpdN	.135 <sup>c</sup>	1.026	.308	.109	.507	1.972
	S_d	-.041 <sup>c</sup>	-.360	.720	-.039	.678	1.475
	R_d	.111 <sup>c</sup>	.848	.399	.091	.514	1.946

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TSpdN	.507
	S_d	.831
	R_d	.571
	SMSP_d	.997
2	PL_TSpdN	.507

S_d	.678
R_d	.514

a. Dependent Variable: PL\_EVCdN

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpdN	SMSP_d
1	1	1.935	1.000	.03	.03	
	2	.065	5.446	.97	.97	
2	1	1.979	1.000	.03	.03	.02
	2	.956	1.439	.00	.00	.98
	3	.065	5.510	.97	.97	.00

a. Dependent Variable: PL\_EVCdN

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

	Minimum	Maximum	Mean	Std. Deviation
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Predicted Value	- .00025061174 5287	.03726967424 1543	.01098901098 9011	.00520960733 4322
Std. Predicted Value	-2.157	5.045	.000	1.000
Standard Error of Predicted Value	.001	.008	.001	.001
Adjusted Predicted Value	- .00223716674 3726	.04347337782 3830	.01103873900 5125	.00562854400 8906
Residual	- .02078734710 8126	.02676815353 3340	.00000000000 0000	.00958437888 5409
Std. Residual	-2.145	2.762	.000	.989
Stud. Residual	-2.236	2.777	-.001	1.002
Deleted Residual	- .02258992381 3939	.02707200497 3888	- .00004972801 6114	.00987030136 0830
Stud. Deleted Residual	-2.289	2.891	.002	1.015
Mahal. Distance	.021	67.911	1.978	7.532
Cook's Distance	.000	.178	.011	.030
Centered Leverage Value	.000	.755	.022	.084

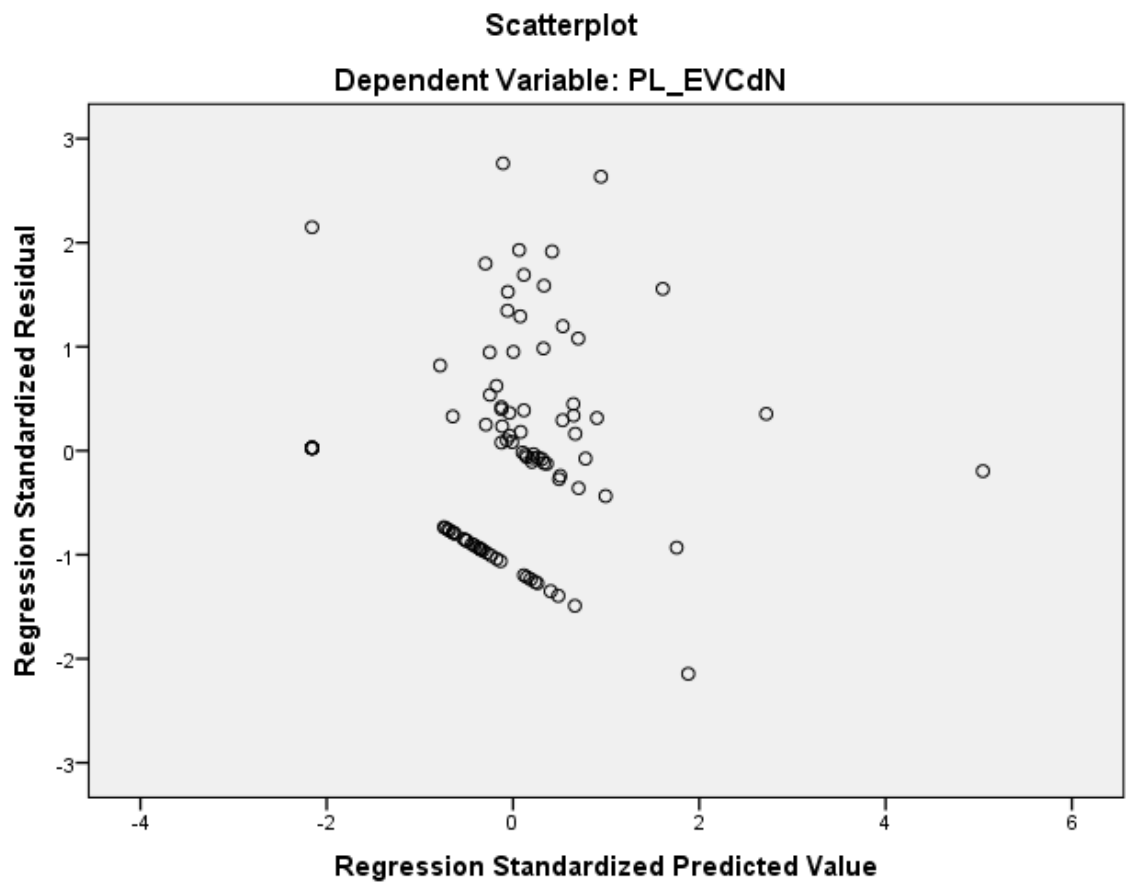
#### Residuals Statistics<sup>a</sup>

	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		06-JUN-2015 11:27:41
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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 EVCd_TpdN
		/METHOD=STEPWISE PL_TpdN PL_TSpdN S_d R_d SMSP_d
		/SCATTERPLOT=(*ZRESID ,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.20
	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
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1	PL_TSpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: EVCd\_TpdN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.295 <sup>a</sup>	.087	.077	.00446548314 5402

a. Predictors: (Constant), PL\_TSpdN

b. Dependent Variable: EVCd\_TpdN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	8.494	.005 <sup>b</sup>
	Residual	.002	89	.000		

Total	.002	90			
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a. Dependent Variable: EVCd\_TpdN

b. Predictors: (Constant), PL\_TSpdN

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.015	.001		10.806	.000
PL_TSpdN	-.339	.116	-.295	-2.914	.005

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

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
PL_TSpdN	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	PL_TpdN	.052 <sup>b</sup>	.363	.717	.039	.507	1.972
	S_d	.078 <sup>b</sup>	.696	.488	.074	.815	1.228
	R_d	-.020 <sup>b</sup>	-.153	.878	-.016	.613	1.632
	SMSP_d	.138 <sup>b</sup>	1.366	.175	.144	.998	1.002

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpdN	.507	
	S_d	.815	
	R_d	.613	
	SMSP_d	.998	

a. Dependent Variable: EVCd\_TpdN

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	1.939	1.000	.03	.03
	2	.061	5.642	.97	.97

a. Dependent Variable: EVCd\_TpdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00706615252 4203	.01471643242 9850	.01098901098 9011	.00137183118 2978
Std. Predicted Value	-2.860	2.717	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00624465662 9860	.01518070045 8586	.01099048562 9336	.00140990139 4513
Residual	- .01139061711 7286	.00800845772 0280	.00000000000 0000	.00444060560 8406
Std. Residual	-2.551	1.793	.000	.994
Stud. Residual	-2.566	1.803	.000	1.005
Deleted Residual	- .01152827870 1007	.00809875782 5792	- .00000147464 0325	.00453516491 6690
Stud. Deleted Residual	-2.652	1.827	-.006	1.020
Mahal. Distance	.000	8.177	.989	2.020
Cook's Distance	.000	.166	.011	.023

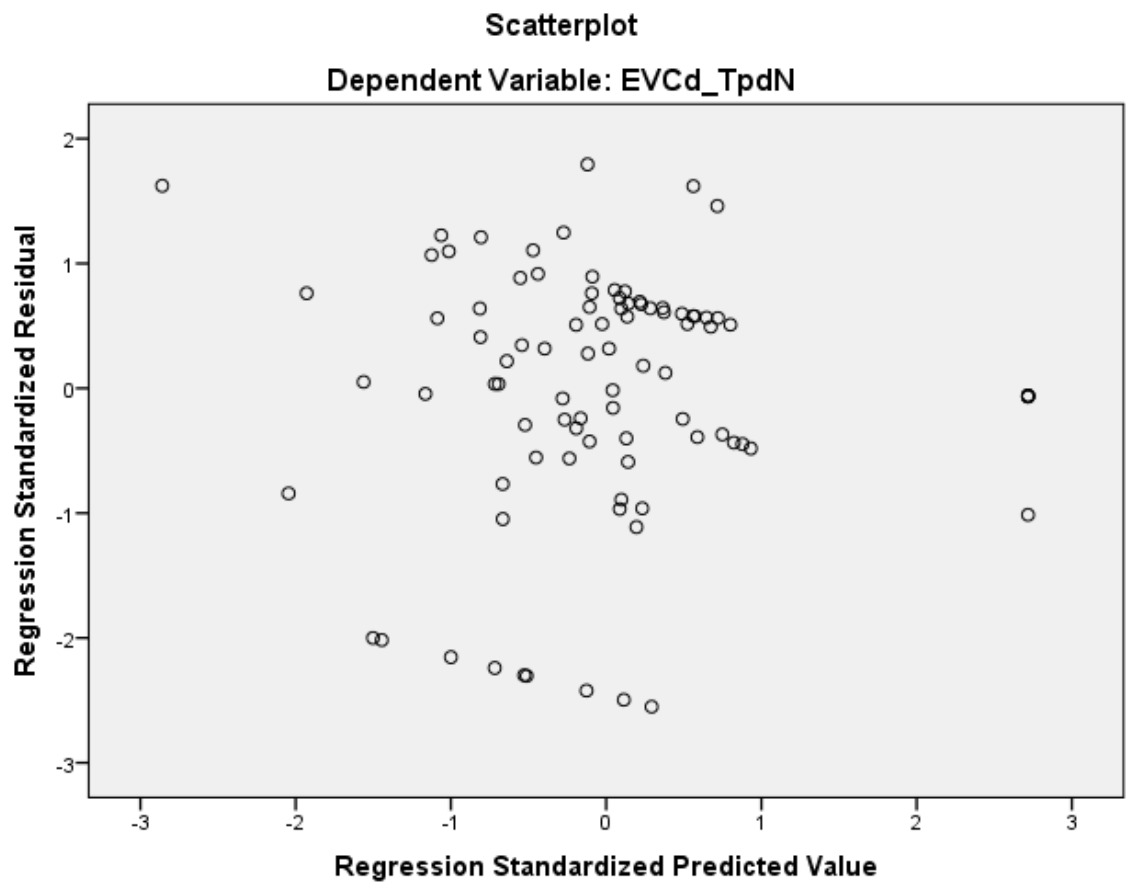
Centered Leverage Value	.000	.091	.011	.022
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# Residuals Statistics<sup>a</sup>

	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 PL\_TpdN PL\_TSpdN S\_d R\_d SMSP\_d

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

/SAVE COOK.

## Regression

### Notes

Output Created		06-JUN-2015 11:27:59
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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
		/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	00:00:00.22
	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
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1	PL_TSpdN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: EVCd\_TSpdN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.344 <sup>a</sup>	.118	.108	.00446619285 5122

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	.000	1	.000	11.947	.001 <sup>b</sup>
	Residual	.002	89	.000		

Total	.002	90			
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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)	.015	.001		11.313	.000
PL_TSpdN	-.402	.116	-.344	-3.456	.001

**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	.054 <sup>b</sup>	.381	.704	.041	.507	1.972
	S_d	.025 <sup>b</sup>	.223	.824	.024	.815	1.228
	R_d	-.113 <sup>b</sup>	-.888	.377	-.094	.613	1.632
	SMSP_d	.054 <sup>b</sup>	.539	.591	.057	.998	1.002

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpdN	.507	
	S_d	.815	
	R_d	.613	
	SMSP_d	.998	

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	1.939	1.000	.03	.03
	2	.061	5.642	.97	.97

a. Dependent Variable: EVCd\_TSpdN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00633582938 4625	.01541037112 4744	.01098901098 9011	.00162722648 3470
Std. Predicted Value	-2.860	2.717	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00539099005 9823	.01592116989 1953	.01099348726 7626	.00166995496 2794
Residual	- .01146538369 3576	.00833223946 3925	.00000000000 0000	.00444131136 4280
Std. Residual	-2.567	1.866	.000	.994
Stud. Residual	-2.583	1.969	.000	1.005
Deleted Residual	- .01160394959 1517	.00927707832 3066	- .00000447627 8615	.00454029307 2436
Stud. Deleted Residual	-2.670	2.002	-.006	1.019
Mahal. Distance	.000	8.177	.989	2.020
Cook's Distance	.000	.220	.011	.027

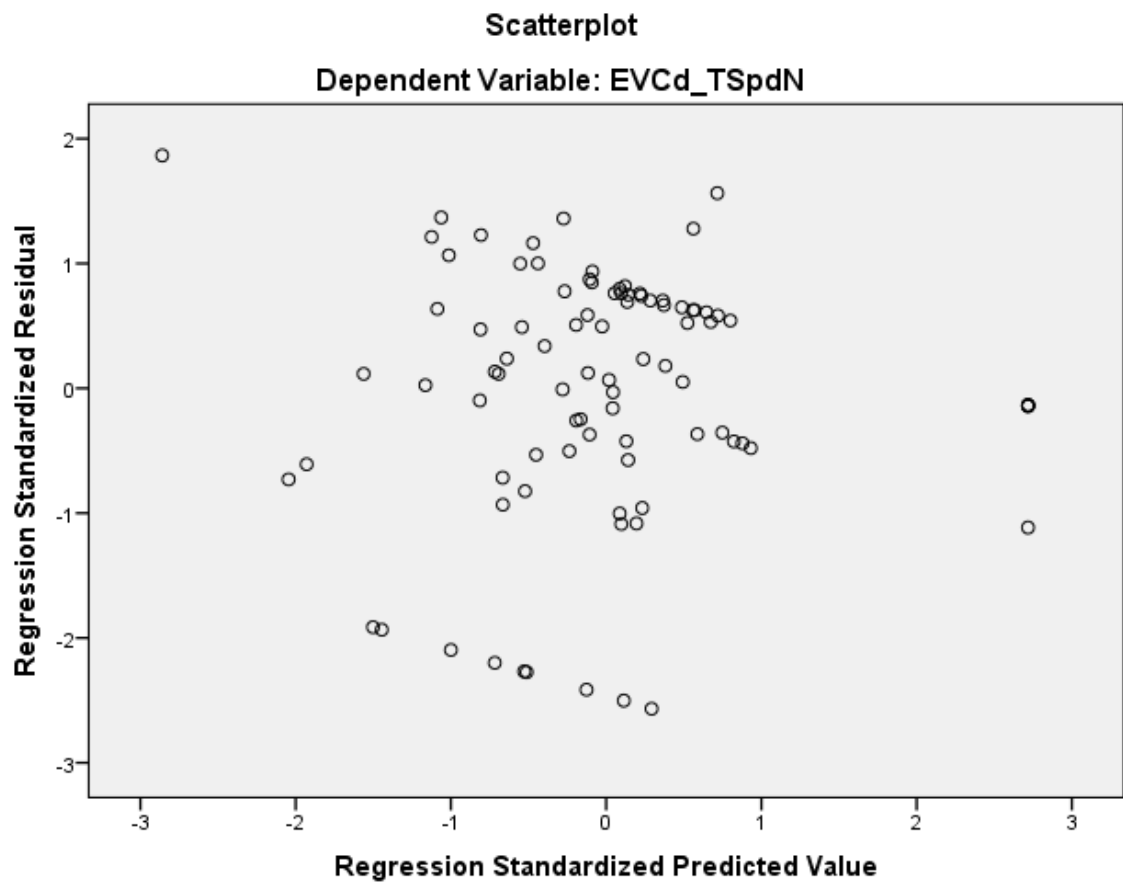
Centered Leverage Value	.000	.091	.011	.022
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#### Residuals Statistics<sup>a</sup>

	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\_TSpdN

## 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  
AvgPL\_d AvgGL\_d PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

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

/SAVE COOK.

## Regression

### Notes

Output Created		06-JUN-2015 12:11:03
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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 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	00:00:00.22
	Elapsed Time	00:00:00.22
	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	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	PL_TpoutN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	Edges_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

5	CC_d	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: Ecout

**Model Summary<sup>f</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.526 <sup>a</sup>	.277	.269	.003625690169034
2	.592 <sup>b</sup>	.351	.336	.003454487073017
3	.651 <sup>c</sup>	.424	.404	.003272577508678
4	.674 <sup>d</sup>	.454	.428	.003205026182357
5	.694 <sup>e</sup>	.481	.451	.003141265170361

a. Predictors: (Constant), Reciprocity

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

c. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN

d. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN,  
Edges\_d

e. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN,  
Edges\_d, CC\_d

f. Dependent Variable: ECout

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	34.049	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	23.774	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			
3	Regression	.001	3	.000	21.345	.000 <sup>d</sup>
	Residual	.001	87	.000		
	Total	.002	90			
4	Regression	.001	4	.000	17.867	.000 <sup>e</sup>
	Residual	.001	86	.000		
	Total	.002	90			
5	Regression	.001	5	.000	15.785	.000 <sup>f</sup>
	Residual	.001	85	.000		

Total	.002	90			
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a. Dependent Variable: Ecout

b. Predictors: (Constant), Reciprocity

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

d. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN

e. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN, Edges\_d

f. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN, Edges\_d, CC\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		27.410	.000
	Reciprocity	-.132	.023	-.526	-5.835	.000
2	(Constant)	.021	.003		7.891	.000
	Reciprocity	-.110	.023	-.440	-4.877	.000
	TSpats_d	-.763	.241	-.286	-3.169	.002
3	(Constant)	.022	.003		8.748	.000
	Reciprocity	-.093	.022	-.374	-4.261	.000
	TSpats_d	-.769	.228	-.288	-3.371	.001
	PL_TpoutN	-.129	.039	-.278	-3.325	.001

4	(Constant)	.025	.003		8.804	.000
	Reciprocity	-.082	.022	-.328	-3.717	.000
	TSpaths_d	-1.112	.274	-.416	-4.063	.000
	PL_TpoutN	-.117	.039	-.253	-3.049	.003
	Edges_d	.036	.017	.214	2.169	.033
5	(Constant)	.026	.003		9.209	.000
	Reciprocity	-.105	.024	-.420	-4.343	.000
	TSpaths_d	-1.207	.272	-.452	-4.438	.000
	PL_TpoutN	-.102	.038	-.220	-2.663	.009
	Edges_d	.039	.016	.231	2.382	.019
	CC_d	.011	.005	.196	2.128	.036

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.908	1.101
	TSpaths_d	.908	1.101
3	(Constant)		
	Reciprocity	.862	1.161
	TSpaths_d	.908	1.101

	PL_TpoutN	.945	1.058
4	(Constant)		
	Reciprocity	.814	1.229
	TSpaths_d	.605	1.652
	PL_TpoutN	.925	1.081
	Edges_d	.654	1.528
5	(Constant)		
	Reciprocity	.654	1.530
	TSpaths_d	.589	1.698
	PL_TpoutN	.894	1.119
	Edges_d	.650	1.539
	CC_d	.720	1.389

a. Dependent Variable: Ecout

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	.021 <sup>b</sup>	.230	.819	.024	.995	1.005	.995
	Edges_d	.016 <sup>b</sup>	.172	.864	.018	.997	1.003	.997
	Den_d	.219 <sup>b</sup>	2.496	.014	.257	1.000	1.000	1.000

	CC_d	.178 <sup>b</sup>	1.746	.084	.183	.763	1.310	.763
	GD_d	-.200 <sup>b</sup>	-1.894	.061	-.198	.708	1.412	.708
	Tpaths_d	-.233 <sup>b</sup>	-2.322	.023	-.240	.772	1.295	.772
	TSpaths_d	-.286 <sup>b</sup>	-3.169	.002	-.320	.908	1.101	.908
	AvgPL_d	-.142 <sup>b</sup>	-1.287	.202	-.136	.658	1.520	.658
	AvgGL_d	-.309 <sup>b</sup>	-3.001	.004	-.305	.704	1.420	.704
	PL_TpoutN	-.276 <sup>b</sup>	-3.120	.002	-.316	.945	1.058	.945
	PL_TSpout N	-.148 <sup>b</sup>	-1.634	.106	-.172	.973	1.028	.973
	S_pro	.120 <sup>b</sup>	1.264	.210	.134	.897	1.114	.897
	R_pro	.007 <sup>b</sup>	.073	.942	.008	.863	1.159	.863
	SMSP_d	.045 <sup>b</sup>	.457	.649	.049	.839	1.192	.839
2	Nodes	.254 <sup>c</sup>	2.513	.014	.260	.682	1.467	.622
	Edges_d	.257 <sup>c</sup>	2.516	.014	.260	.668	1.497	.609
	Den_d	.029 <sup>c</sup>	.219	.827	.024	.425	2.351	.386
	CC_d	.227 <sup>c</sup>	2.343	.021	.244	.748	1.337	.731
	GD_d	-.083 <sup>c</sup>	-.741	.461	-.079	.593	1.687	.593
	Tpaths_d	.438 <sup>c</sup>	1.625	.108	.172	.099	10.050	.099
	AvgPL_d	.034 <sup>c</sup>	.279	.781	.030	.493	2.030	.493
	AvgGL_d	-.164 <sup>c</sup>	-1.182	.240	-.126	.380	2.634	.380
	PL_TpoutN	-.278 <sup>c</sup>	-3.325	.001	-.336	.945	1.058	.862
	PL_TSpout N	-.164 <sup>c</sup>	-1.914	.059	-.201	.970	1.031	.881

	S_pro	.130 <sup>c</sup>	1.436	.155	.152	.897	1.115	.828
	R_pro	.004 <sup>c</sup>	.042	.967	.004	.863	1.159	.792
	SMSP_d	.107 <sup>c</sup>	1.123	.265	.120	.807	1.239	.801
3	Nodes	.208 <sup>d</sup>	2.127	.036	.224	.665	1.503	.618
	Edges_d	.214 <sup>d</sup>	2.169	.033	.228	.654	1.528	.605
	Den_d	.049 <sup>d</sup>	.390	.697	.042	.424	2.356	.386
	CC_d	.178 <sup>d</sup>	1.886	.063	.199	.725	1.380	.674
	GD_d	-.020 <sup>d</sup>	-.181	.857	-.020	.573	1.745	.573
	Tpaths_d	.369 <sup>d</sup>	1.433	.156	.153	.099	10.122	.099
	AvgPL_d	.025 <sup>d</sup>	.216	.829	.023	.492	2.031	.492
	AvgGL_d	-.148 <sup>d</sup>	-1.122	.265	-.120	.379	2.638	.379
	PL_TSpout N	.039 <sup>d</sup>	.345	.731	.037	.527	1.896	.514
	S_pro	.160 <sup>d</sup>	1.880	.064	.199	.887	1.127	.798
	R_pro	.130 <sup>d</sup>	1.383	.170	.147	.744	1.344	.744
	SMSP_d	.065 <sup>d</sup>	.712	.478	.077	.790	1.265	.747
4	Nodes	-1.983 <sup>e</sup>	-.880	.382	-.095	.001	798.050	.001
	Den_d	.048 <sup>e</sup>	.390	.697	.042	.424	2.356	.318
	CC_d	.196 <sup>e</sup>	2.128	.036	.225	.720	1.389	.589
	GD_d	.077 <sup>e</sup>	.675	.502	.073	.492	2.031	.433
	Tpaths_d	.470 <sup>e</sup>	1.856	.067	.197	.096	10.396	.096
	AvgPL_d	.127 <sup>e</sup>	1.045	.299	.113	.432	2.312	.399
	AvgGL_d	.038 <sup>e</sup>	.229	.820	.025	.238	4.210	.204



	PL_TSpout N	.046 <sup>e</sup>	.416	.679	.045	.527	1.898	.510
	S_pro	.175 <sup>e</sup>	2.101	.039	.222	.882	1.133	.602
	R_pro	.176 <sup>e</sup>	1.891	.062	.201	.716	1.397	.598
	SMSP_d	.087 <sup>e</sup>	.962	.339	.104	.782	1.279	.576
5	Nodes	-1.221 <sup>f</sup>	-.543	.588	-.059	.001	821.709	.001
	Den_d	-.018 <sup>f</sup>	-.144	.886	-.016	.397	2.518	.291
	GD_d	.021 <sup>f</sup>	.183	.856	.020	.464	2.156	.433
	Tpaths_d	.066 <sup>f</sup>	.142	.888	.015	.028	35.642	.028
	AvgPL_d	-.054 <sup>f</sup>	-.354	.724	-.039	.260	3.839	.260
	AvgGL_d	-.128 <sup>f</sup>	-.724	.471	-.079	.196	5.112	.191
	PL_TSpout N	.040 <sup>f</sup>	.372	.711	.041	.527	1.899	.498
	S_pro	.115 <sup>f</sup>	1.192	.237	.129	.657	1.523	.536
	R_pro	.110 <sup>f</sup>	1.073	.286	.116	.576	1.736	.576
	SMSP_d	-.206 <sup>f</sup>	-1.339	.184	-.145	.256	3.909	.236

a. Dependent Variable: ECont

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, PL\_TpoutN

e. Predictors in the Model: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN, Edges\_d

f. Predictors in the Model: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN, Edges\_d, CC\_d

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Reciprocity	TSpaths_d
1	1	1.546	1.000	.23	.23	
	2	.454	1.845	.77	.77	
2	1	2.430	1.000	.00	.06	.00
	2	.560	2.083	.00	.87	.00
	3	.009	16.037	.99	.07	.99
3	1	3.127	1.000	.00	.03	.00
	2	.567	2.348	.00	.87	.00
	3	.296	3.251	.01	.02	.01
	4	.009	18.256	.99	.08	.99
4	1	3.316	1.000	.00	.03	.00
	2	.881	1.940	.00	.10	.00
	3	.531	2.500	.00	.75	.00
	4	.265	3.535	.01	.00	.01
	5	.007	22.488	.99	.12	.99
5	1	3.390	1.000	.00	.02	.00
	2	1.160	1.710	.00	.08	.00
	3	.831	2.020	.00	.01	.00
	4	.360	3.069	.00	.74	.00
	5	.254	3.655	.01	.10	.00

6	.006	23.045	.99	.06	.99
---	------	--------	-----	-----	-----

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

Model	Dimension	Variance Proportions		
		PL_TpoutN	Edges_d	CC_d
1	1			
	2			
2	1			
	2			
	3			
3	1	.03		
	2	.01		
	3	.95		
	4	.01		
4	1	.02	.01	
	2	.03	.49	
	3	.07	.09	
	4	.88	.11	
	5	.00	.30	
5	1	.02	.01	.01
	2	.01	.05	.39
	3	.06	.49	.08
	4	.00	.07	.40

5	.91	.08	.10
6	.00	.31	.03

a. Dependent Variable: ECont

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00318466406 3156	.01545185502 6186	.01098901098 9011	.00294167989 1781
Std. Predicted Value	-2.653	1.517	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	.00129940093 0293	.03357841819 5248	.01112269815 9885	.00388655272 7656
Residual	- .00905920285 7316	.00534046581 0150	.00000000000 0000	.00305276101 6221
Std. Residual	-2.884	1.700	.000	.972
Stud. Residual	-2.922	1.745	-.003	1.011
Deleted Residual	- .01931543275 7139	.00835541915 1485	- .00013368717 0874	.00389362555 7259
Stud. Deleted Residual	-3.062	1.767	-.006	1.020
Mahal. Distance	.446	85.823	4.945	11.486
Cook's Distance	.000	6.078	.085	.642

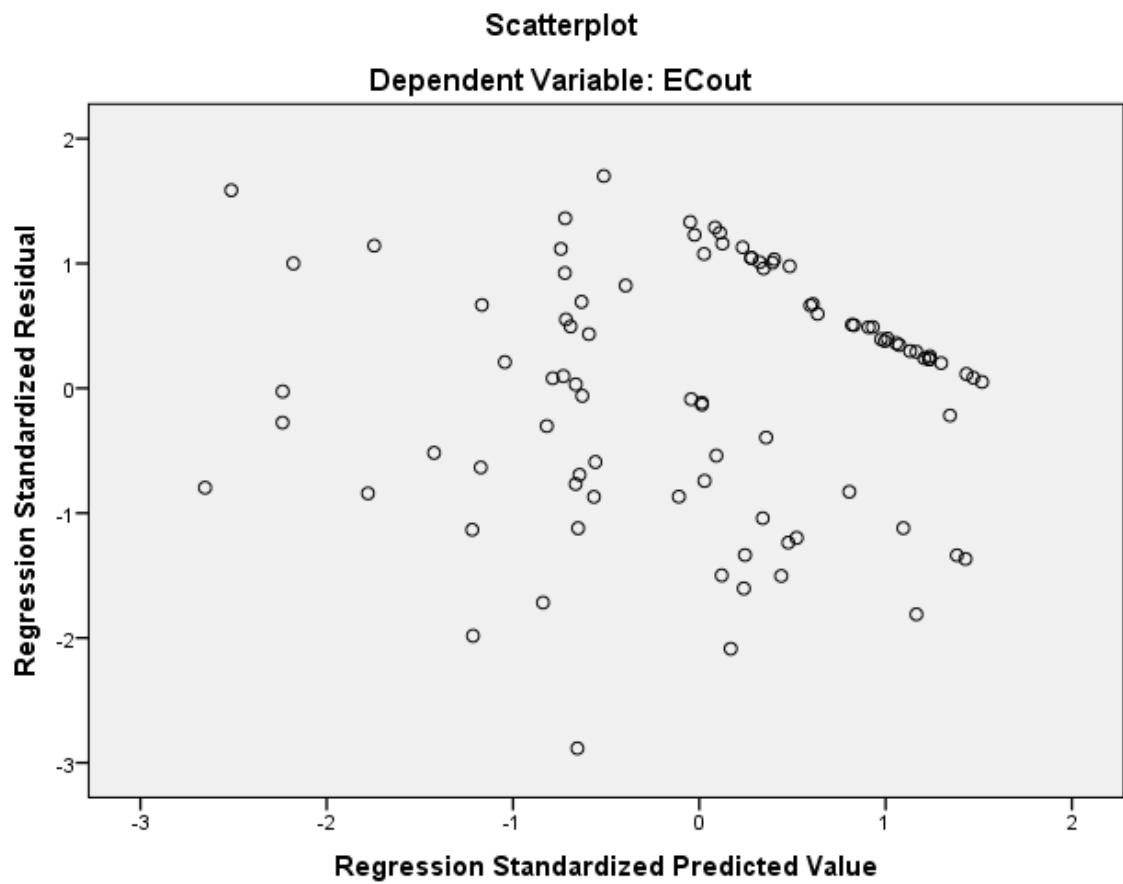
Centered Leverage Value	.005	.954	.055	.128
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#### Residuals Statistics<sup>a</sup>

	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 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

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Comments		
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	Weight	<none>
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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_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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	Memory Required	17552 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	Reciprocity		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	PL_TpoutN		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).
4	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_EVCoutN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.498 <sup>a</sup>	.248	.240	.00997767991 5616
2	.629 <sup>b</sup>	.395	.381	.00900077284 6746
3	.657 <sup>c</sup>	.431	.411	.00877860707 8964
4	.679 <sup>d</sup>	.461	.436	.00859067873 1720

a. Predictors: (Constant), Reciprocity

b. Predictors: (Constant), Reciprocity, PL\_TpoutN

c. Predictors: (Constant), Reciprocity, PL\_TpoutN, GD\_d

d. Predictors: (Constant), Reciprocity, PL\_TpoutN, GD\_d, AvgPL\_d

e. Dependent Variable: PL\_EVCoutN

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

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

1	Regression	.003	1	.003	29.382	.000 <sup>b</sup>
	Residual	.009	89	.000		
	Total	.012	90			
2	Regression	.005	2	.002	28.737	.000 <sup>c</sup>
	Residual	.007	88	.000		
	Total	.012	90			
3	Regression	.005	3	.002	21.977	.000 <sup>d</sup>
	Residual	.007	87	.000		
	Total	.012	90			
4	Regression	.005	4	.001	18.423	.000 <sup>e</sup>
	Residual	.006	86	.000		
	Total	.012	90			

a. Dependent Variable: PL\_EVCoutN

b. Predictors: (Constant), Reciprocity

c. Predictors: (Constant), Reciprocity, PL\_TpoutN

d. Predictors: (Constant), Reciprocity, PL\_TpoutN, GD\_d

e. Predictors: (Constant), Reciprocity, PL\_TpoutN, GD\_d, AvgPL\_d

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

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

		B	Std. Error	Beta		
1	(Constant)	.007	.001		5.843	.000
	Reciprocity	.336	.062	.498	5.420	.000
2	(Constant)	.003	.002		1.669	.099
	Reciprocity	.274	.058	.406	4.756	.000
	PL_TpoutN	.495	.107	.394	4.623	.000
3	(Constant)	-.002	.002		-.723	.472
	Reciprocity	.196	.065	.290	2.995	.004
	PL_TpoutN	.454	.106	.362	4.292	.000
	GD_d	.504	.215	.229	2.347	.021
4	(Constant)	-.001	.002		-.306	.760
	Reciprocity	.242	.067	.359	3.600	.001
	PL_TpoutN	.397	.107	.316	3.719	.000
	GD_d	1.102	.343	.500	3.209	.002
	AvgPL_d	-.677	.307	-.351	-2.202	.030

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.945	1.058

	PL_TpoutN	.945	1.058
3	(Constant)		
	Reciprocity	.699	1.431
	PL_TpoutN	.920	1.087
	GD_d	.689	1.451
4	(Constant)		
	Reciprocity	.629	1.590
	PL_TpoutN	.865	1.156
	GD_d	.258	3.874
	AvgPL_d	.246	4.061

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	-.057 <sup>b</sup>	-.622	.536	-.066	.995	1.005	.995
	Edges_d	-.044 <sup>b</sup>	-.477	.635	-.051	.997	1.003	.997
	Den_d	-.108 <sup>b</sup>	-1.180	.241	-.125	1.000	1.000	1.000
	CC_d	-.187 <sup>b</sup>	-1.803	.075	-.189	.763	1.310	.763
	GD_d	.297 <sup>b</sup>	2.823	.006	.288	.708	1.412	.708

	Tpaths_d	.079 <sup>b</sup>	.750	.455	.080	.772	1.295	.772
	TSpaths_d	.111 <sup>b</sup>	1.156	.251	.122	.908	1.101	.908
	AvgPL_d	.042 <sup>b</sup>	.369	.713	.039	.658	1.520	.658
	AvgGL_d	.098 <sup>b</sup>	.893	.374	.095	.704	1.420	.704
	PL_TpoutN	.394 <sup>b</sup>	4.623	.000	.442	.945	1.058	.945
	PL_TSpout N	.180 <sup>b</sup>	1.963	.053	.205	.973	1.028	.973
	S_pro	.141 <sup>b</sup>	1.466	.146	.154	.897	1.114	.897
	R_pro	.300 <sup>b</sup>	3.185	.002	.321	.863	1.159	.863
	SMSP_d	-.162 <sup>b</sup>	-1.631	.106	-.171	.839	1.192	.839
2	Nodes	-.006 <sup>c</sup>	-.077	.939	-.008	.977	1.023	.928
	Edges_d	.003 <sup>c</sup>	.033	.974	.004	.982	1.018	.931
	Den_d	-.123 <sup>c</sup>	-1.489	.140	-.158	.998	1.002	.944
	CC_d	-.114 <sup>c</sup>	-1.188	.238	-.126	.740	1.352	.700
	GD_d	.229 <sup>c</sup>	2.347	.021	.244	.689	1.451	.689
	Tpaths_d	.095 <sup>c</sup>	1.008	.316	.107	.771	1.297	.733
	TSpaths_d	.114 <sup>c</sup>	1.321	.190	.140	.908	1.101	.862
	AvgPL_d	.054 <sup>c</sup>	.523	.602	.056	.658	1.521	.630
	AvgGL_d	.088 <sup>c</sup>	.887	.378	.095	.704	1.421	.679
	PL_TSpout N	-.151 <sup>c</sup>	-1.330	.187	-.141	.530	1.887	.515
	S_pro	.102 <sup>c</sup>	1.157	.251	.123	.888	1.126	.864
	R_pro	.170 <sup>c</sup>	1.796	.076	.189	.744	1.344	.744

	SMSP_d	-.105 <sup>c</sup>	-1.148	.254	-.122	.822	1.217	.777
3	Nodes	.006 <sup>d</sup>	.070	.944	.008	.973	1.028	.687
	Edges_d	.011 <sup>d</sup>	.131	.896	.014	.980	1.020	.688
	Den_d	-.083 <sup>d</sup>	-.999	.320	-.107	.945	1.058	.652
	CC_d	-.194 <sup>d</sup>	-2.008	.048	-.212	.679	1.473	.611
	Tpaths_d	-.040 <sup>d</sup>	-.358	.721	-.039	.524	1.910	.468
	TSpaths_d	.039 <sup>d</sup>	.419	.676	.045	.755	1.325	.573
	AvgPL_d	-.351 <sup>d</sup>	-2.202	.030	-.231	.246	4.061	.246
	AvgGL_d	-.146 <sup>d</sup>	-1.068	.288	-.114	.350	2.854	.343
	PL_TSpout N	-.165 <sup>d</sup>	-1.494	.139	-.159	.529	1.892	.511
	S_pro	.034 <sup>d</sup>	.374	.710	.040	.777	1.288	.603
	R_pro	.086 <sup>d</sup>	.804	.424	.086	.578	1.730	.536
	SMSP_d	-.193 <sup>d</sup>	-2.090	.040	-.220	.735	1.361	.616
4	Nodes	.027 <sup>e</sup>	.331	.741	.036	.960	1.042	.243
	Edges_d	.033 <sup>e</sup>	.410	.683	.044	.965	1.036	.242
	Den_d	-.097 <sup>e</sup>	-1.195	.236	-.128	.939	1.064	.245
	CC_d	-.099 <sup>e</sup>	-.795	.429	-.086	.403	2.480	.146
	Tpaths_d	.154 <sup>e</sup>	1.141	.257	.123	.344	2.908	.162
	TSpaths_d	.114 <sup>e</sup>	1.190	.237	.128	.679	1.472	.222
	AvgGL_d	.105 <sup>e</sup>	.571	.570	.062	.186	5.376	.131
	PL_TSpout N	-.176 <sup>e</sup>	-1.630	.107	-.174	.528	1.895	.246

S_pro	.095 <sup>e</sup>	1.015	.313	.109	.720	1.389	.228
R_pro	.107 <sup>e</sup>	1.022	.310	.110	.574	1.743	.242
SMSP_d	-.112 <sup>e</sup>	-.970	.335	-.105	.471	2.124	.158

a. Dependent Variable: PL\_EVCoutN

b. Predictors in the Model: (Constant), Reciprocity

c. Predictors in the Model: (Constant), Reciprocity, PL\_TpoutN

d. Predictors in the Model: (Constant), Reciprocity, PL\_TpoutN, GD\_d

e. Predictors in the Model: (Constant), Reciprocity, PL\_TpoutN, GD\_d, AvgPL\_d

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Reciprocity	PL_TpoutN
1	1	1.546	1.000	.23	.23	
	2	.454	1.845	.77	.77	
2	1	2.249	1.000	.06	.08	.06
	2	.522	2.075	.10	.92	.10
	3	.229	3.135	.84	.00	.84
3	1	3.129	1.000	.01	.03	.03
	2	.525	2.441	.04	.72	.07
	3	.271	3.399	.11	.01	.89
	4	.075	6.448	.84	.24	.00



4	1	4.027	1.000	.01	.02	.02
	2	.526	2.768	.04	.63	.08
	3	.323	3.532	.03	.06	.73
	4	.097	6.449	.92	.28	.08
	5	.028	12.008	.01	.02	.09

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

Model	Dimension	Variance Proportions	
		GD_d	AvgPL_d
1	1		
	2		
2	1		
	2		
	3		
3	1	.01	
	2	.00	
	3	.07	
	4	.92	
4	1	.00	.00
	2	.00	.00
	3	.01	.02
	4	.07	.11
	5	.92	.87

a. Dependent Variable: PL\_EVCoutN

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

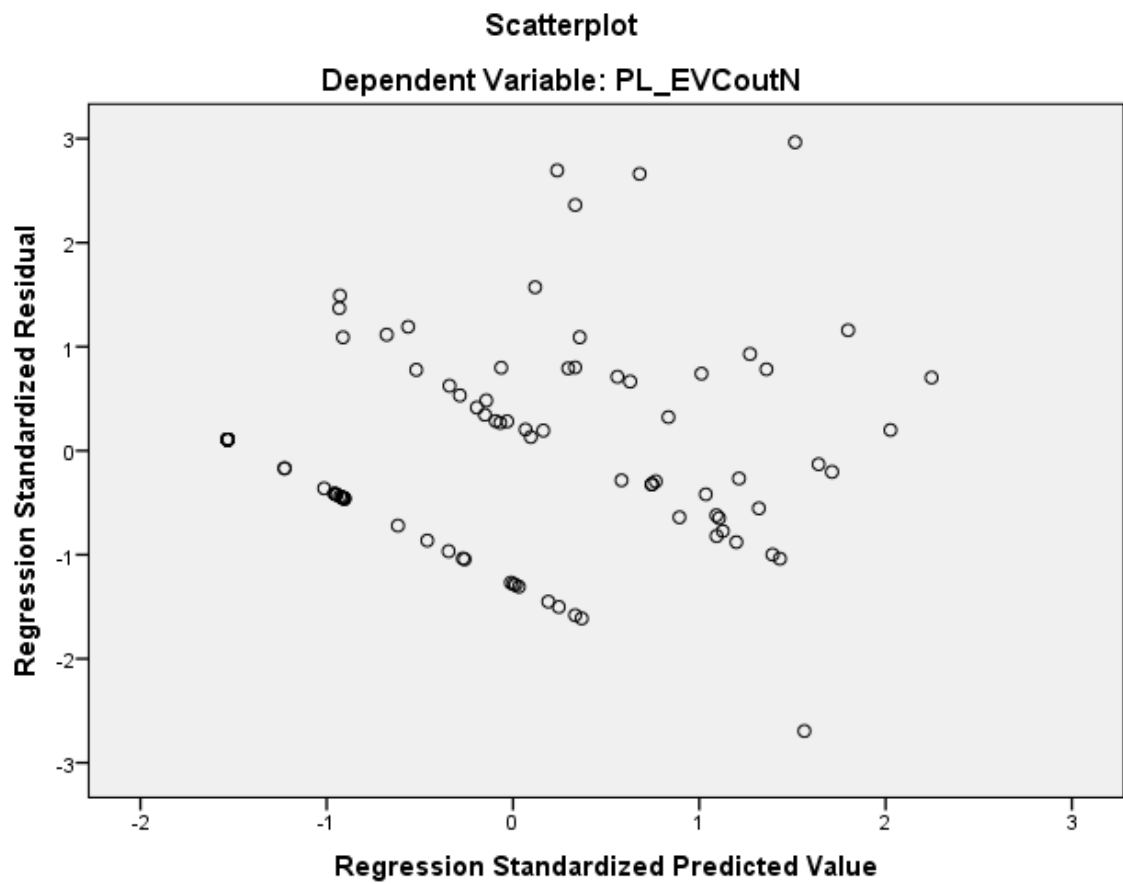
	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00092122459 3185	.02845418266 9520	.01098901098 9011	.00777359333 2857
Std. Predicted Value	-1.532	2.247	.000	1.000
Standard Error of Predicted Value	.001	.005	.002	.001
Adjusted Predicted Value	- .00096371211 1115	.02738427184 5222	.01104619723 5915	.00785213200 2320
Residual	- .02314584888 5179	.02548293769 3596	.00000000000 0000	.00839760511 6381
Std. Residual	-2.694	2.966	.000	.978
Stud. Residual	-2.811	3.026	-.003	1.003
Deleted Residual	- .02519798651 3376	.02651301398 8733	- .00005718624 6904	.00885546680 4736
Stud. Deleted Residual	-2.933	3.182	.000	1.023
Mahal. Distance	.359	33.353	3.956	5.146
Cook's Distance	.000	.140	.011	.022
Centered Leverage Value	.004	.371	.044	.057

### 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 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	06-JUN-2015 12:11:56	
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 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	00:00:00.17
	Elapsed Time	00:00:00.18
	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	TSpaths_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	.515 <sup>a</sup>	.265	.256	.01164727956 4002

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: EVCout\_TpoutN

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

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

1	Regression	.004	1	.004	32.045	.000 <sup>b</sup>
	Residual	.012	89	.000		
	Total	.016	90			

a. Dependent Variable: EVCout\_TpoutN

b. Predictors: (Constant), TSpaths\_d

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.037	.009		-4.325	.000
TSpaths_d	4.383	.774	.515	5.661	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1 (Constant)			
TSpaths_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	Nodes	.040 <sup>b</sup>	.375	.709	.040	.738	1.354
	Edges_d	.033 <sup>b</sup>	.307	.759	.033	.721	1.388
	Reciprocity	-.078 <sup>b</sup>	-.817	.416	-.087	.908	1.101
	Den_d	.052 <sup>b</sup>	.396	.693	.042	.483	2.069
	CC_d	.057 <sup>b</sup>	.603	.548	.064	.929	1.076
	GD_d	-.061 <sup>b</sup>	-.587	.559	-.062	.762	1.312
	Tpaths_d	.102 <sup>b</sup>	.419	.676	.045	.142	7.039
	AvgPL_d	.040 <sup>b</sup>	.358	.721	.038	.681	1.468
	AvgGL_d	.015 <sup>b</sup>	.115	.908	.012	.499	2.003
	PL_TpoutN	-.107 <sup>b</sup>	-1.183	.240	-.125	.996	1.004
	PL_TSpoutN	-.129 <sup>b</sup>	-1.428	.157	-.150	1.000	1.000
	S_pro	.155 <sup>b</sup>	1.715	.090	.180	.984	1.016
	R_pro	-.106 <sup>b</sup>	-1.165	.247	-.123	.990	1.011
	SMSP_d	-.002 <sup>b</sup>	-.020	.984	-.002	.915	1.093

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

Model	Collinearity Statistics
	Minimum Tolerance

1	Nodes	.738
	Edges_d	.721
	Reciprocity	.908
	Den_d	.483
	CC_d	.929
	GD_d	.762
	Tpaths_d	.142
	AvgPL_d	.681
	AvgGL_d	.499
	PL_TpoutN	.996
	PL_TSpoutN	1.000
	S_pro	.984
	R_pro	.990
	SMSP_d	.915

a. Dependent Variable: EVCout\_TpoutN

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpaths_d

1	1	1.990	1.000	.01	.01
	2	.010	14.008	.99	.99

a. Dependent Variable: EVCout\_TpoutN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00152689462 9933	.03742644935 8463	.01098901098 9011	.00694993377 5511
Std. Predicted Value	-1.361	3.804	.000	1.000
Standard Error of Predicted Value	.001	.005	.002	.001
Adjusted Predicted Value	.00157669372 8566	.03736919909 7157	.01097862662 7054	.00692222954 9558
Residual	- .01936668716 3711	.03058253601 1934	.00000000000 0000	.01158239170 7789
Std. Residual	-1.663	2.626	.000	.994
Stud. Residual	-1.686	2.644	.000	1.003
Deleted Residual	- .01990684308 1117	.03100549802 1841	.00001038436 1957	.01178525978 9429
Stud. Deleted Residual	-1.704	2.739	.006	1.017
Mahal. Distance	.000	14.470	.989	2.230
Cook's Distance	.000	.050	.009	.013

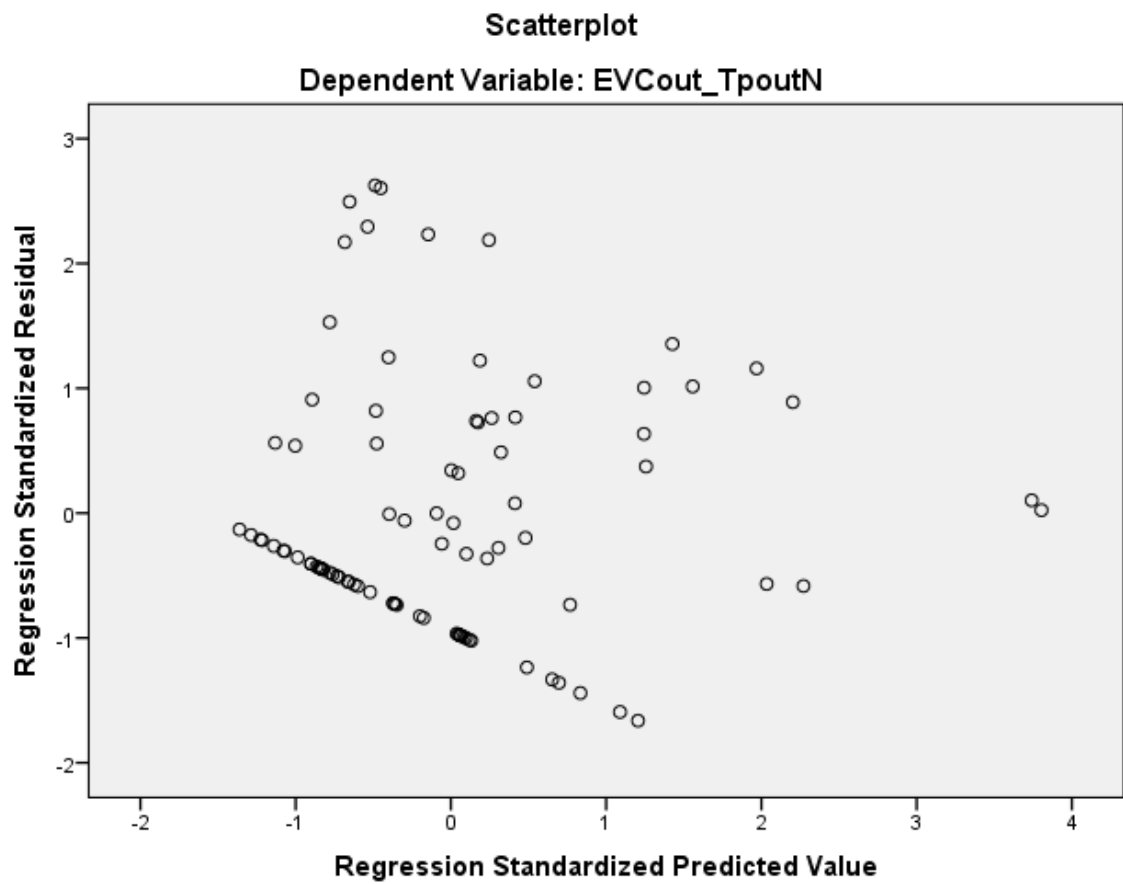
Centered Leverage Value	.000	.161	.011	.025
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#### Residuals Statistics<sup>a</sup>

	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: 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 TSpats\_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		
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 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	00:00:00.17
	Elapsed Time	00:00:00.17
	Memory Required	17632 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
1	TSpaths_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	.553 <sup>a</sup>	.306	.298	.01166963332 9579

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: EVCout\_TSpoutN

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

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



1	Regression	.005	1	.005	39.162	.000 <sup>b</sup>
	Residual	.012	89	.000		
	Total	.017	90			

a. Dependent Variable: EVCut\_TSpoutN

b. Predictors: (Constant), TSpaths\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.042	.009		-4.918	.000
	TSpaths_d	4.854	.776	.553	6.258	.000

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

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

a. Dependent Variable: EVCut\_TSpoutN

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	.024 <sup>b</sup>	.231	.817	.025	.738	1.354
	Edges_d	.018 <sup>b</sup>	.169	.866	.018	.721	1.388
	Reciprocity	-.037 <sup>b</sup>	-.402	.689	-.043	.908	1.101
	Den_d	.103 <sup>b</sup>	.807	.422	.086	.483	2.069
	CC_d	.048 <sup>b</sup>	.525	.601	.056	.929	1.076
	GD_d	-.070 <sup>b</sup>	-.687	.494	-.073	.762	1.312
	Tpaths_d	.124 <sup>b</sup>	.527	.600	.056	.142	7.039
	AvgPL_d	.049 <sup>b</sup>	.452	.652	.048	.681	1.468
	AvgGL_d	.039 <sup>b</sup>	.313	.755	.033	.499	2.003
	PL_TpoutN	-.120 <sup>b</sup>	-1.363	.176	-.144	.996	1.004
	PL_TSpoutN	-.131 <sup>b</sup>	-1.488	.140	-.157	1.000	1.000
	S_pro	.172 <sup>b</sup>	1.958	.053	.204	.984	1.016
	R_pro	-.106 <sup>b</sup>	-1.200	.233	-.127	.990	1.011
	SMSP_d	-.036 <sup>b</sup>	-.389	.698	-.041	.915	1.093

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

Model	Collinearity Statistics
	Minimum Tolerance

1	Nodes	.738
	Edges_d	.721
	Reciprocity	.908
	Den_d	.483
	CC_d	.929
	GD_d	.762
	Tpaths_d	.142
	AvgPL_d	.681
	AvgGL_d	.499
	PL_TpoutN	.996
	PL_TSpoutN	1.000
	S_pro	.984
	R_pro	.990
	SMSP_d	.915

a. Dependent Variable: EVCout\_TSpoutN

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	TSpaths_d

1	1	1.990	1.000	.01	.01
	2	.010	14.008	.99	.99

a. Dependent Variable: EVCout\_TSpoutN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00050859834 3004	.04027160257 1011	.01098901098 9011	.00769787337 2936
Std. Predicted Value	-1.361	3.804	.000	1.000
Standard Error of Predicted Value	.001	.005	.002	.001
Adjusted Predicted Value	.00052518612 9380	.04035080224 2756	.01098055719 2209	.00768466902 4704
Residual	- .02026827819 6454	.03267431259 1553	.00000000000 0000	.01160462093 8884
Std. Residual	-1.737	2.800	.000	.994
Stud. Residual	-1.761	2.819	.000	1.003
Deleted Residual	- .02083358168 6020	.03312620520 5917	.00000845379 6802	.01181325580 0015
Stud. Deleted Residual	-1.782	2.938	.006	1.019
Mahal. Distance	.000	14.470	.989	2.230
Cook's Distance	.000	.055	.009	.014

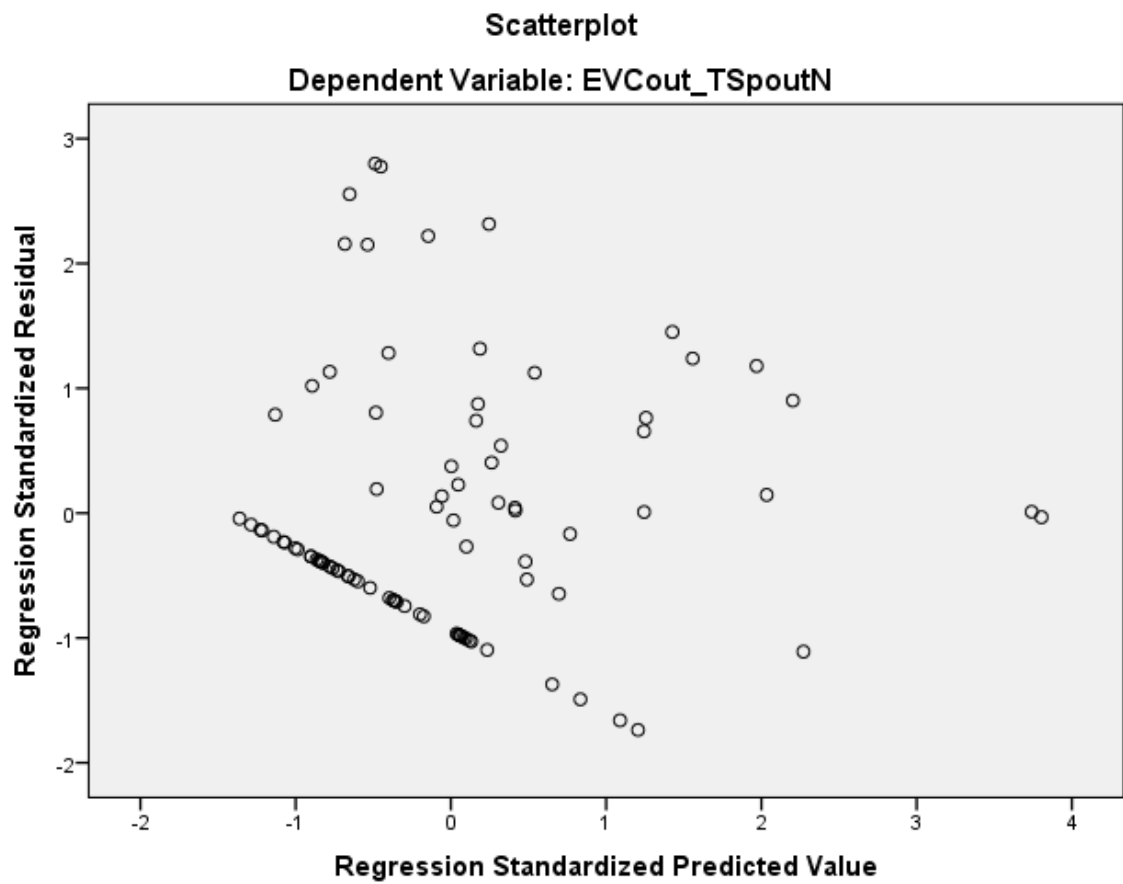
Centered Leverage Value	.000	.161	.011	.025
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#### Residuals Statistics<sup>a</sup>

	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: 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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Comments		
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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 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	17680 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_13	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	PL_TpoutN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	CC_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: Ecout

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523 <sup>a</sup>	.274	.266	.00364093363 6336
2	.617 <sup>b</sup>	.380	.366	.00338254376 9792
3	.666 <sup>c</sup>	.443	.424	.00322529505 3360
4	.685 <sup>d</sup>	.470	.445	.00316604620 4998

a. Predictors: (Constant), Reciprocity

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

c. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN

d. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN, CC\_d

e. Dependent Variable: Ecout

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

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

1	Regression	.000	1	.000	33.203	.000 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.002	89			
2	Regression	.001	2	.000	26.714	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			
3	Regression	.001	3	.000	22.818	.000 <sup>d</sup>
	Residual	.001	86	.000		
	Total	.002	89			
4	Regression	.001	4	.000	18.822	.000 <sup>e</sup>
	Residual	.001	85	.000		
	Total	.002	89			

a. Dependent Variable: Ecout

b. Predictors: (Constant), Reciprocity

c. Predictors: (Constant), Reciprocity, TSpahts\_d

d. Predictors: (Constant), Reciprocity, TSpahts\_d, PL\_TpoutN

e. Predictors: (Constant), Reciprocity, TSpahts\_d, PL\_TpoutN, CC\_d

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

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

		B	Std. Error	Beta		
1	(Constant)	.012	.000		27.017	.000
	Reciprocity	-.131	.023	-.523	-5.762	.000
2	(Constant)	.023	.003		8.237	.000
	Reciprocity	-.099	.023	-.397	-4.392	.000
	TSpaths_d	-1.015	.263	-.350	-3.868	.000
3	(Constant)	.024	.003		8.891	.000
	Reciprocity	-.086	.022	-.343	-3.899	.000
	TSpaths_d	-.978	.251	-.337	-3.903	.000
	PL_TpoutN	-.120	.039	-.258	-3.113	.003
4	(Constant)	.025	.003		9.268	.000
	Reciprocity	-.108	.024	-.433	-4.475	.000
	TSpaths_d	-1.060	.249	-.365	-4.253	.000
	PL_TpoutN	-.106	.039	-.226	-2.741	.007
	CC_d	.011	.005	.192	2.061	.042

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.870	1.149

	TSpaths_d	.870	1.149
3	(Constant)		
	Reciprocity	.836	1.196
	TSpaths_d	.868	1.152
	PL_TpoutN	.946	1.057
4	(Constant)		
	Reciprocity	.665	1.504
	TSpaths_d	.846	1.182
	PL_TpoutN	.914	1.094
	CC_d	.721	1.386

a. Dependent Variable: Ecout

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.103 <sup>b</sup>	-1.140	.258	-.121	.999	1.001	.999
	Edges_d	-.121 <sup>b</sup>	-1.341	.183	-.142	.999	1.001	.999
	Den_d	.243 <sup>b</sup>	2.776	.007	.285	1.000	1.000	1.000
	CC_d	.178 <sup>b</sup>	1.728	.088	.182	.763	1.311	.763
	GD_d	-.195 <sup>b</sup>	-1.838	.069	-.193	.712	1.405	.712

	Tpaths_d	-.278 <sup>b</sup>	-2.712	.008	-.279	.730	1.370	.730
	TSpaths_d	-.350 <sup>b</sup>	-3.868	.000	-.383	.870	1.149	.870
	AvgPL_d	-.141 <sup>b</sup>	-1.269	.208	-.135	.660	1.515	.660
	AvgGL_d	-.307 <sup>b</sup>	-2.965	.004	-.303	.707	1.415	.707
	PL_TpoutN	-.273 <sup>b</sup>	-3.062	.003	-.312	.948	1.055	.948
	PL_TSpout N	-.144 <sup>b</sup>	-1.577	.118	-.167	.975	1.025	.975
	S_pro	.122 <sup>b</sup>	1.282	.203	.136	.899	1.112	.899
	R_pro	.016 <sup>b</sup>	.168	.867	.018	.867	1.154	.867
	SMSP_d	.045 <sup>b</sup>	.448	.655	.048	.839	1.192	.839
2	Nodes	.185 <sup>c</sup>	1.690	.095	.179	.582	1.719	.506
	Edges_d	.196 <sup>c</sup>	1.707	.091	.181	.526	1.902	.458
	Den_d	.008 <sup>c</sup>	.063	.950	.007	.462	2.166	.402
	CC_d	.238 <sup>c</sup>	2.512	.014	.261	.746	1.340	.712
	GD_d	.002 <sup>c</sup>	.018	.986	.002	.527	1.896	.527
	Tpaths_d	.514 <sup>c</sup>	2.020	.047	.213	.106	9.434	.106
	AvgPL_d	.130 <sup>c</sup>	1.028	.307	.110	.445	2.245	.445
	AvgGL_d	-.011 <sup>c</sup>	-.069	.945	-.007	.277	3.608	.277
	PL_TpoutN	-.258 <sup>c</sup>	-3.113	.003	-.318	.946	1.057	.836
	PL_TSpout N	-.147 <sup>c</sup>	-1.734	.086	-.184	.975	1.025	.851
	S_pro	.142 <sup>c</sup>	1.613	.110	.171	.896	1.116	.802
	R_pro	.044 <sup>c</sup>	.482	.631	.052	.862	1.161	.781

	SMSP_d	.125 <sup>c</sup>	1.334	.186	.142	.802	1.247	.780
3	Nodes	.136 <sup>d</sup>	1.273	.206	.137	.567	1.765	.496
	Edges_d	.162 <sup>d</sup>	1.464	.147	.157	.520	1.923	.453
	Den_d	.029 <sup>d</sup>	.245	.807	.027	.460	2.173	.400
	CC_d	.192 <sup>d</sup>	2.061	.042	.218	.721	1.386	.665
	GD_d	.055 <sup>d</sup>	.485	.629	.053	.516	1.939	.516
	Tpaths_d	.439 <sup>d</sup>	1.789	.077	.190	.105	9.538	.105
	AvgPL_d	.105 <sup>d</sup>	.871	.386	.094	.443	2.255	.443
	AvgGL_d	-.026 <sup>d</sup>	-.172	.864	-.019	.277	3.612	.277
	PL_TSpout N	.043 <sup>d</sup>	.393	.696	.043	.535	1.868	.519
	S_pro	.169 <sup>d</sup>	2.013	.047	.213	.888	1.126	.780
	R_pro	.160 <sup>d</sup>	1.750	.084	.186	.752	1.329	.752
	SMSP_d	.084 <sup>d</sup>	.920	.360	.099	.782	1.278	.736
4	Nodes	.160 <sup>e</sup>	1.524	.131	.164	.561	1.784	.479
	Edges_d	.179 <sup>e</sup>	1.642	.104	.176	.518	1.932	.441
	Den_d	-.036 <sup>e</sup>	-.293	.770	-.032	.429	2.330	.364
	GD_d	-.001 <sup>e</sup>	-.009	.993	-.001	.485	2.063	.485
	Tpaths_d	.052 <sup>e</sup>	.115	.909	.013	.030	32.894	.030
	AvgPL_d	-.081 <sup>e</sup>	-.526	.600	-.057	.267	3.741	.267
	AvgGL_d	-.182 <sup>e</sup>	-1.111	.270	-.120	.231	4.326	.231
	PL_TSpout N	.038 <sup>e</sup>	.347	.729	.038	.535	1.869	.507

S_pro	.109 <sup>e</sup>	1.127	.263	.122	.660	1.516	.536
R_pro	.096 <sup>e</sup>	.945	.347	.103	.604	1.654	.580
SMSP_d	-.206 <sup>e</sup>	-1.325	.189	-.143	.255	3.914	.236

a. Dependent Variable: ECont

b. Predictors in the Model: (Constant), Reciprocity

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

d. Predictors in the Model: (Constant), Reciprocity, TSpaths\_d, PL\_TpoutN

e. Predictors in the Model: (Constant), Reciprocity, TSpaths\_d, PL\_TpoutN, CC\_d

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Reciprocity	TSpaths_d
1	1	1.549	1.000	.23	.23	
	2	.451	1.853	.77	.77	
2	1	2.438	1.000	.00	.06	.00
	2	.554	2.097	.00	.84	.00
	3	.008	17.622	.99	.11	.99
3	1	3.140	1.000	.00	.03	.00
	2	.564	2.360	.00	.85	.00
	3	.288	3.302	.01	.01	.01
	4	.008	20.007	.99	.10	.99



4	1	3.221	1.000	.00	.03	.00
	2	1.121	1.695	.00	.06	.00
	3	.383	2.901	.00	.67	.00
	4	.267	3.473	.00	.20	.00
	5	.008	20.518	.99	.04	.99

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

Model	Dimension	Variance Proportions	
		PL_TpoutN	CC_d
1	1		
	2		
2	1		
	2		
	3		
3	1	.03	
	2	.02	
	3	.95	
	4	.00	
4	1	.03	.01
	2	.02	.45
	3	.05	.36
	4	.91	.16
	5	.00	.03

a. Dependent Variable: ECont

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

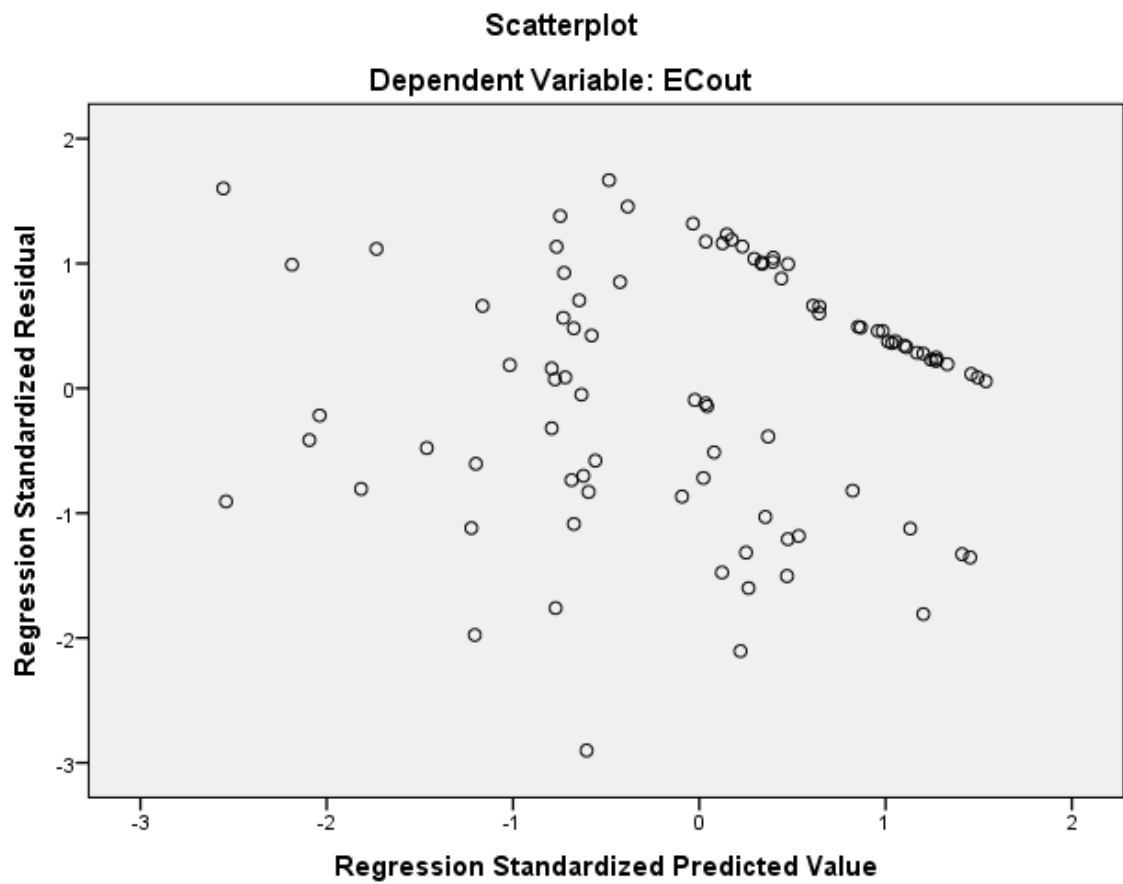
	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00351262907 4976	.01543080806 7322	.01095263350 1831	.00291198531 5252
Std. Predicted Value	-2.555	1.538	.000	1.000
Standard Error of Predicted Value	.000	.003	.001	.000
Adjusted Predicted Value	.00131580396 5554	.01542189810 4250	.01088018914 7019	.00307515302 4157
Residual	- .00918648764 4911	.00528036803 0071	.00000000000 0000	.00309408120 8370
Std. Residual	-2.902	1.668	.000	.977
Stud. Residual	-2.938	1.749	.008	1.010
Deleted Residual	- .00942143052 8164	.00833901576 6978	.00007244435 4812	.00336909103 7288
Stud. Deleted Residual	-3.082	1.771	.005	1.020
Mahal. Distance	.431	65.699	3.956	7.566
Cook's Distance	.000	1.040	.022	.110
Centered Leverage Value	.005	.738	.044	.085

### 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: ECount

## 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

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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_14	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	PL_TpoutN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: ECount

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.566 <sup>a</sup>	.320	.312	.00354110950 8170
2	.657 <sup>b</sup>	.432	.419	.00325649027 5779
3	.693 <sup>c</sup>	.480	.462	.00313360511 2505

a. Predictors: (Constant), Reciprocity

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

c. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN

d. Dependent Variable: ECont

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	40.997	.000 <sup>b</sup>
	Residual	.001	87	.000		
	Total	.002	88			
2	Regression	.001	2	.000	32.674	.000 <sup>c</sup>
	Residual	.001	86	.000		
	Total	.002	88			
3	Regression	.001	3	.000	26.151	.000 <sup>d</sup>



Residual	.001	85	.000		
Total	.002	88			

a. Dependent Variable: ECont

b. Predictors: (Constant), Reciprocity

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

d. Predictors: (Constant), Reciprocity, TSpats\_d, PL\_TpoutN

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.013	.000		27.804	.000
	Reciprocity	-.157	.025	-.566	-6.403	.000
2	(Constant)	.024	.003		8.704	.000
	Reciprocity	-.126	.024	-.455	-5.304	.000
	TSpats_d	-1.039	.253	-.352	-4.108	.000
3	(Constant)	.024	.003		9.252	.000
	Reciprocity	-.110	.024	-.397	-4.681	.000
	TSpats_d	-1.003	.244	-.340	-4.114	.000
	PL_TpoutN	-.107	.038	-.228	-2.807	.006

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Reciprocity	1.000	1.000
2	(Constant)		
	Reciprocity	.900	1.111
	TSpaths_d	.900	1.111
3	(Constant)		
	Reciprocity	.848	1.179
	TSpaths_d	.897	1.114
	PL_TpoutN	.926	1.080

a. Dependent Variable: Ecout

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.097 <sup>b</sup>	-1.101	.274	-.118	1.000	1.000	1.000
	Edges_d	-.116 <sup>b</sup>	-1.316	.192	-.140	.998	1.002	.998
	Den_d	.212 <sup>b</sup>	2.459	.016	.256	.994	1.006	.994

	CC_d	-.043 <sup>b</sup>	-.469	.641	-.050	.940	1.064	.940
	GD_d	-.218 <sup>b</sup>	-2.230	.028	-.234	.785	1.274	.785
	Tpaths_d	-.342 <sup>b</sup>	-3.797	.000	-.379	.837	1.195	.837
	TSpaths_d	-.352 <sup>b</sup>	-4.108	.000	-.405	.900	1.111	.900
	AvgPL_d	-.241 <sup>b</sup>	-2.497	.014	-.260	.788	1.269	.788
	AvgGL_d	-.352 <sup>b</sup>	-3.837	.000	-.382	.803	1.245	.803
	PL_TpoutN	-.246 <sup>b</sup>	-2.783	.007	-.287	.929	1.077	.929
	PL_TSpout N	-.126 <sup>b</sup>	-1.416	.160	-.151	.969	1.032	.969
	S_pro	-.016 <sup>b</sup>	-.177	.860	-.019	.997	1.003	.997
	R_pro	-.089 <sup>b</sup>	-.995	.323	-.107	.968	1.033	.968
	SMSP_d	-.043 <sup>b</sup>	-.469	.641	-.050	.940	1.064	.940
2	Nodes	.205 <sup>c</sup>	1.957	.054	.208	.580	1.724	.522
	Edges_d	.218 <sup>c</sup>	1.977	.051	.210	.523	1.911	.472
	Den_d	-.088 <sup>c</sup>	-.716	.476	-.077	.437	2.291	.395
	CC_d	.032 <sup>c</sup>	.372	.711	.040	.897	1.114	.859
	GD_d	-.035 <sup>c</sup>	-.326	.745	-.035	.582	1.720	.582
	Tpaths_d	.080 <sup>c</sup>	.265	.791	.029	.074	13.545	.074
	AvgPL_d	-.023 <sup>c</sup>	-.195	.846	-.021	.500	1.998	.500
	AvgGL_d	-.152 <sup>c</sup>	-1.018	.311	-.110	.298	3.354	.298
	PL_TpoutN	-.228 <sup>c</sup>	-2.807	.006	-.291	.926	1.080	.848
	PL_TSpout N	-.128 <sup>c</sup>	-1.566	.121	-.167	.969	1.032	.874

	S_pro	.000 <sup>c</sup>	-.001	.999	.000	.995	1.005	.898
	R_pro	-.066 <sup>c</sup>	-.792	.431	-.086	.963	1.038	.880
	SMSP_d	.032 <sup>c</sup>	.372	.711	.040	.897	1.114	.859
3	Nodes	.160 <sup>d</sup>	1.551	.125	.167	.563	1.778	.510
	Edges_d	.186 <sup>d</sup>	1.727	.088	.185	.516	1.936	.465
	Den_d	-.055 <sup>d</sup>	-.460	.647	-.050	.432	2.315	.390
	CC_d	.007 <sup>d</sup>	.079	.937	.009	.886	1.128	.816
	GD_d	.014 <sup>d</sup>	.138	.891	.015	.565	1.771	.565
	Tpaths_d	.072 <sup>d</sup>	.249	.804	.027	.074	13.546	.074
	AvgPL_d	-.023 <sup>d</sup>	-.208	.836	-.023	.500	1.998	.500
	AvgGL_d	-.145 <sup>d</sup>	-1.015	.313	-.110	.298	3.354	.298
	PL_TSpout N	.038 <sup>d</sup>	.352	.725	.038	.535	1.868	.512
	S_pro	.053 <sup>d</sup>	.652	.516	.071	.944	1.060	.848
	R_pro	.051 <sup>d</sup>	.562	.576	.061	.750	1.334	.721
	SMSP_d	.007 <sup>d</sup>	.079	.937	.009	.886	1.128	.816

a. Dependent Variable: Ecout

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, PL\_TpoutN

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	Reciprocity	TSpaths_d
1	1	1.559	1.000	.22	.22	
	2	.441	1.881	.78	.78	
2	1	2.447	1.000	.00	.06	.00
	2	.545	2.118	.00	.86	.00
	3	.008	17.547	.99	.08	.99
3	1	3.158	1.000	.00	.03	.00
	2	.549	2.398	.00	.86	.00
	3	.285	3.329	.01	.04	.01
	4	.008	19.936	.99	.08	.99

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions
		PL_TpoutN
1	1	
	2	
2	1	
	2	
	3	
3	1	.03
	2	.01

3	.96
4	.00

a. Dependent Variable: ECout

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00345362676 3076	.01536221802 2346	.01096721568 0474	.00295872669 5677
Std. Predicted Value	-2.539	1.485	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00251883035 5257	.01535003166 6458	.01095046097 5772	.00298202576 7264
Residual	- .00921852141 6187	.00512965489 1789	.00000000000 0000	.00307972822 9404
Std. Residual	-2.942	1.637	.000	.983
Stud. Residual	-2.976	1.780	.003	1.005
Deleted Residual	- .00943452771 7531	.00606445129 9608	.00001675470 4702	.00322317019 4865
Stud. Deleted Residual	-3.126	1.803	-.001	1.016
Mahal. Distance	.351	20.574	2.966	2.971
Cook's Distance	.000	.144	.012	.019

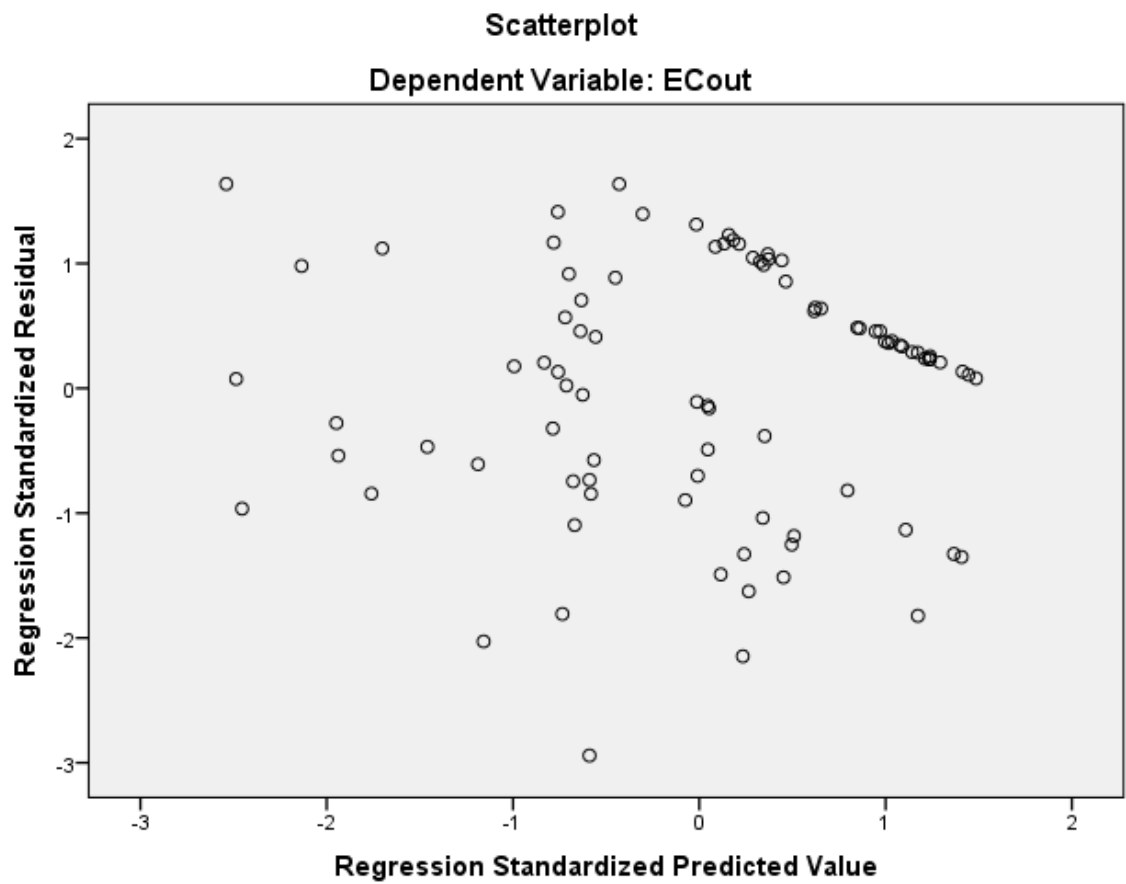
Centered Leverage Value	.004	.234	.034	.034
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#### Residuals Statistics<sup>a</sup>

	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: ECont

## Charts



REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

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

/NOORIGIN

/DEPENDENT ECont

/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 ECout  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_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	AvgGL_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	.504 <sup>a</sup>	.254	.245	.003683134028206

a. Predictors: (Constant), AvgGL\_d

b. Dependent Variable: Ecout

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	30.241	.000 <sup>b</sup>
	Residual	.001	89	.000		

Total	.002	90			
-------	------	----	--	--	--

a. Dependent Variable: ECont

b. Predictors: (Constant), AvgGL\_d

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.019	.002		12.395	.000
AvgGL_d	-.754	.137	-.504	-5.499	.000

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

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
AvgGL_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	-.074 <sup>b</sup>	-.497	.621	-.053	.376	2.660
	Tpaths_d	-.034 <sup>b</sup>	-.205	.838	-.022	.304	3.292
	TSpaths_d	-.125 <sup>b</sup>	-.963	.338	-.102	.499	2.003
	AvgPL_d	.274 <sup>b</sup>	1.308	.194	.138	.190	5.273

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.376	
	Tpaths_d	.304	
	TSpaths_d	.499	
	AvgPL_d	.190	

a. Dependent Variable: Ecout

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	1.969	1.000	.02	.02
	2	.031	7.927	.98	.98

a. Dependent Variable: ECont

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00281654787 2499	.01254435162 9913	.01098901098 9011	.00213496642 8833
Std. Predicted Value	-3.828	.729	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00137805310 0780	.01259554736 3162	.01097149814 9642	.00221178005 9870
Residual	- .00919948983 9375	.00683827186 0033	.00000000000 0000	.00366261501 6027
Std. Residual	-2.498	1.857	.000	.994
Stud. Residual	-2.521	2.043	.002	1.009
Deleted Residual	- .00937533192 3366	.00827676616 6091	.00001751283 9369	.00377039426 5137
Stud. Deleted Residual	-2.602	2.080	.000	1.016
Mahal. Distance	.000	14.653	.989	2.345
Cook's Distance	.000	.439	.015	.050

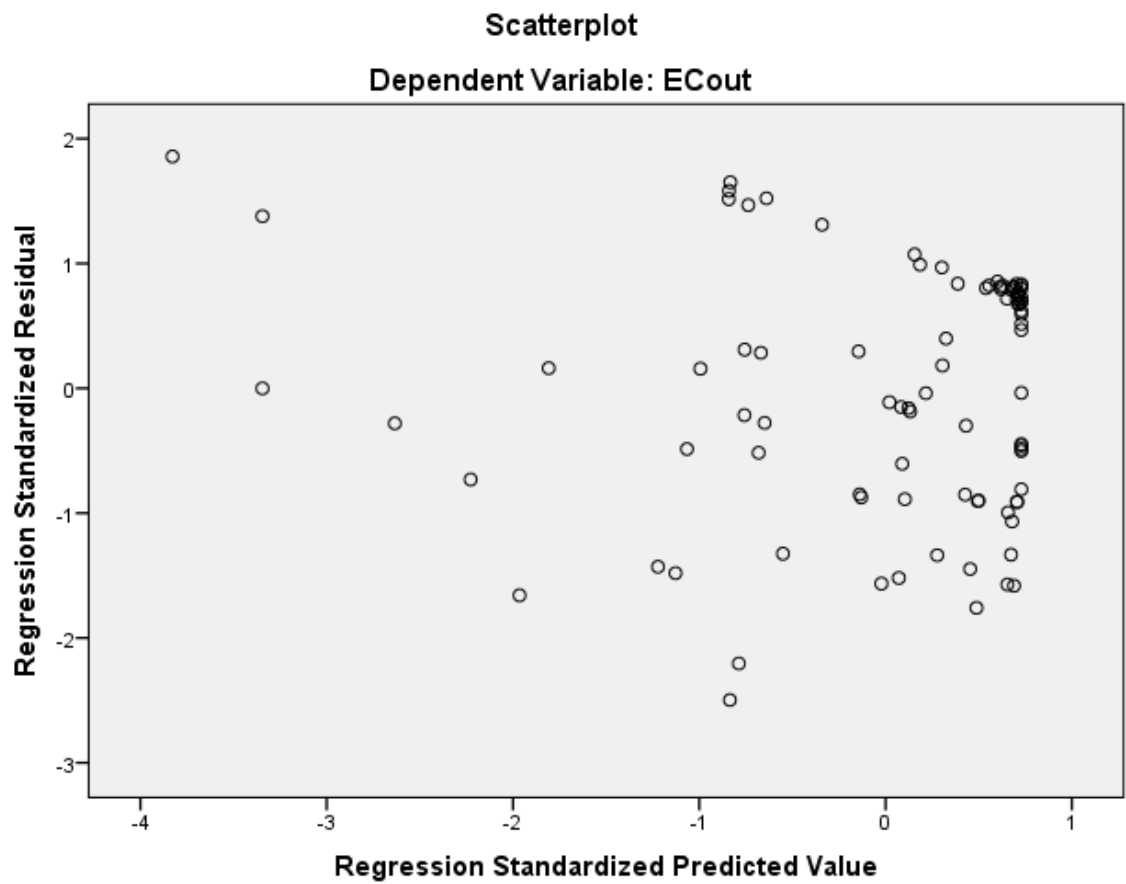
Centered Leverage Value	.000	.163	.011	.026
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# Residuals Statistics<sup>a</sup>

	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		06-JUN-2015 12:07:31
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 PL_EVCoutN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpats_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.23
	Memory Required	5952 bytes
	Additional Memory	
	Required for Residual	0 bytes
Variables Created or Modified	Plots	
	COO_2	Cook's Distance

**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).
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a. Dependent Variable: PL\_EVCoutN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.479 <sup>a</sup>	.230	.221	.01009894208 5401

a. Predictors: (Constant), GD\_d

b. Dependent Variable: PL\_EVCoutN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.003	1	.003	26.556	.000 <sup>b</sup>
	Residual	.009	89	.000		

Total	.012	90			
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a. Dependent Variable: PL\_EVCoutN

b. Predictors: (Constant), GD\_d

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.001	.002		-.252	.802
GD_d	1.057	.205	.479	5.153	.000

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

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
GD_d	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	Tpaths_d	-.038 <sup>b</sup>	-.301	.764	-.032	.556	1.798
	TSpaths_d	.024 <sup>b</sup>	.222	.825	.024	.762	1.312
	AvgPL_d	-.303 <sup>b</sup>	-1.760	.082	-.184	.285	3.511
	AvgGL_d	-.103 <sup>b</sup>	-.677	.500	-.072	.376	2.660

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376

a. Dependent Variable: PL\_EVCoutN

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	1.905	1.000	.05	.05
	2	.095	4.482	.95	.95

a. Dependent Variable: PL\_EVCoutN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00411287834 8678	.03255506232 3809	.01098901098 9011	.00548571788 9651
Std. Predicted Value	-1.253	3.931	.000	1.000
Standard Error of Predicted Value	.001	.004	.001	.001
Adjusted Predicted Value	.00348919630 0507	.03690958023 0713	.01105196729 9649	.00575348689 7691
Residual	- .01947799324 9893	.02990723401 3081	.00000000000 0000	.01004268013 1841
Std. Residual	-1.929	2.961	.000	.994
Stud. Residual	-2.133	3.008	-.003	1.010
Deleted Residual	- .02383251115 6797	.03086109086 8711	- .00006295631 0638	.01036955840 0623
Stud. Deleted Residual	-2.178	3.156	.001	1.023
Mahal. Distance	.152	15.455	.989	2.118
Cook's Distance	.000	.509	.017	.058

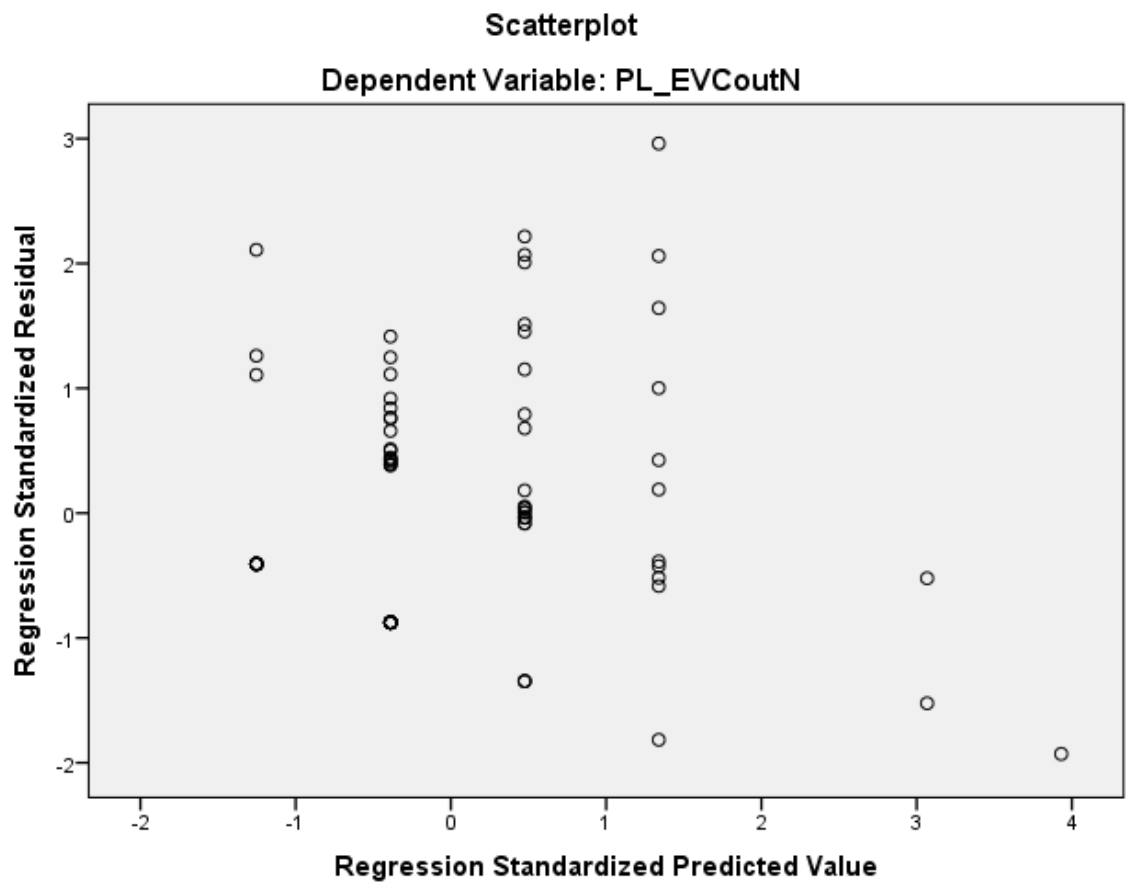
Centered Leverage Value	.002	.172	.011	.024
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# Residuals Statistics<sup>a</sup>

	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\_EVCoutN

## Charts



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 TSpats\_d AvgPL\_d AvgGL\_d

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

/SAVE COOK.



## Regression

### Notes

Output Created		06-JUN-2015 12:07:50
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 EVCut_TpoutN
		/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	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	TSpats_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: EVCout\_TpoutN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.515 <sup>a</sup>	.265	.256	.01164727956 4002

a. Predictors: (Constant), TSpats\_d

b. Dependent Variable: EVCout\_TpoutN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	32.045	.000 <sup>b</sup>
	Residual	.012	89	.000		

Total	.016	90			
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a. Dependent Variable: EVCout\_TpoutN

b. Predictors: (Constant), TSpaths\_d

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.037	.009		-4.325	.000
TSpaths_d	4.383	.774	.515	5.661	.000

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

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
TSpaths_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	-.061 <sup>b</sup>	-.587	.559	-.062	.762	1.312
	Tpaths_d	.102 <sup>b</sup>	.419	.676	.045	.142	7.039
	AvgPL_d	.040 <sup>b</sup>	.358	.721	.038	.681	1.468
	AvgGL_d	.015 <sup>b</sup>	.115	.908	.012	.499	2.003

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.762	
	Tpaths_d	.142	
	AvgPL_d	.681	
	AvgGL_d	.499	

a. Dependent Variable: EVCout\_TpoutN

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	1.990	1.000	.01	.01
	2	.010	14.008	.99	.99

a. Dependent Variable: EVCout\_TpoutN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00152689462 9933	.03742644935 8463	.01098901098 9011	.00694993377 5511
Std. Predicted Value	-1.361	3.804	.000	1.000
Standard Error of Predicted Value	.001	.005	.002	.001
Adjusted Predicted Value	.00157669372 8566	.03736919909 7157	.01097862662 7054	.00692222954 9558
Residual	- .01936668716 3711	.03058253601 1934	.00000000000 0000	.01158239170 7789
Std. Residual	-1.663	2.626	.000	.994
Stud. Residual	-1.686	2.644	.000	1.003
Deleted Residual	- .01990684308 1117	.03100549802 1841	.00001038436 1957	.01178525978 9429
Stud. Deleted Residual	-1.704	2.739	.006	1.017
Mahal. Distance	.000	14.470	.989	2.230
Cook's Distance	.000	.050	.009	.013

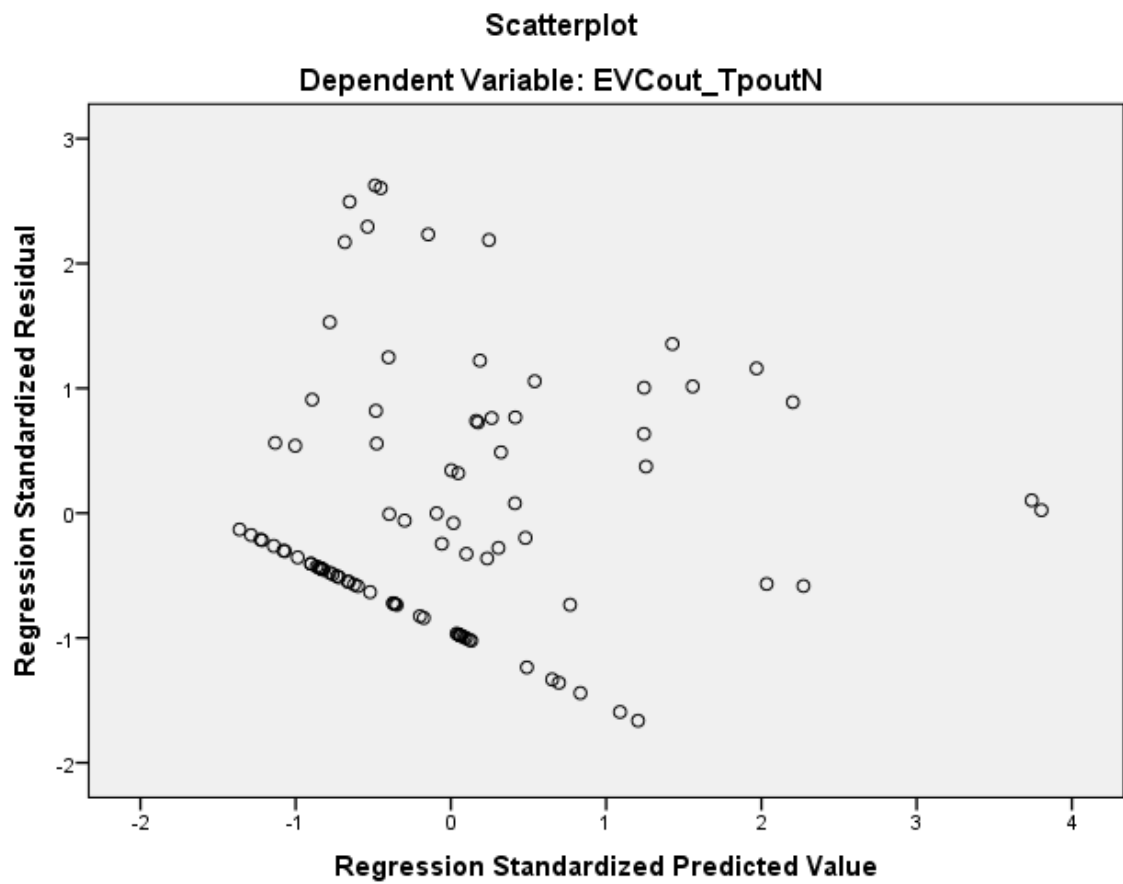
Centered Leverage Value	.000	.161	.011	.025
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# Residuals Statistics<sup>a</sup>

	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: EVCout\_TpoutN

## Charts



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.



## Regression

### Notes

Output Created		06-JUN-2015 12:08:09
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 EVCut_TSpoutN
		/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	00:00:00.21
	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
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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: EVCout\_TSpoutN

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.553 <sup>a</sup>	.306	.298	.01166963332 9579

a. Predictors: (Constant), TSpaths\_d

b. Dependent Variable: EVCout\_TSpoutN

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.005	1	.005	39.162	.000 <sup>b</sup>
	Residual	.012	89	.000		

Total	.017	90			
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a. Dependent Variable: EVCout\_TSpoutN

b. Predictors: (Constant), TSpaths\_d

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.042	.009		-4.918	.000
TSpaths_d	4.854	.776	.553	6.258	.000

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

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
TSpaths_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	-.070 <sup>b</sup>	-.687	.494	-.073	.762	1.312
	Tpaths_d	.124 <sup>b</sup>	.527	.600	.056	.142	7.039
	AvgPL_d	.049 <sup>b</sup>	.452	.652	.048	.681	1.468
	AvgGL_d	.039 <sup>b</sup>	.313	.755	.033	.499	2.003

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_d	.762	
	Tpaths_d	.142	
	AvgPL_d	.681	
	AvgGL_d	.499	

a. Dependent Variable: EVCout\_TSpoutN

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	1.990	1.000	.01	.01
	2	.010	14.008	.99	.99

a. Dependent Variable: EVCout\_TSpoutN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00050859834 3004	.04027160257 1011	.01098901098 9011	.00769787337 2936
Std. Predicted Value	-1.361	3.804	.000	1.000
Standard Error of Predicted Value	.001	.005	.002	.001
Adjusted Predicted Value	.00052518612 9380	.04035080224 2756	.01098055719 2209	.00768466902 4704
Residual	- .02026827819 6454	.03267431259 1553	.00000000000 0000	.01160462093 8884
Std. Residual	-1.737	2.800	.000	.994
Stud. Residual	-1.761	2.819	.000	1.003
Deleted Residual	- .02083358168 6020	.03312620520 5917	.00000845379 6802	.01181325580 0015
Stud. Deleted Residual	-1.782	2.938	.006	1.019
Mahal. Distance	.000	14.470	.989	2.230
Cook's Distance	.000	.055	.009	.014

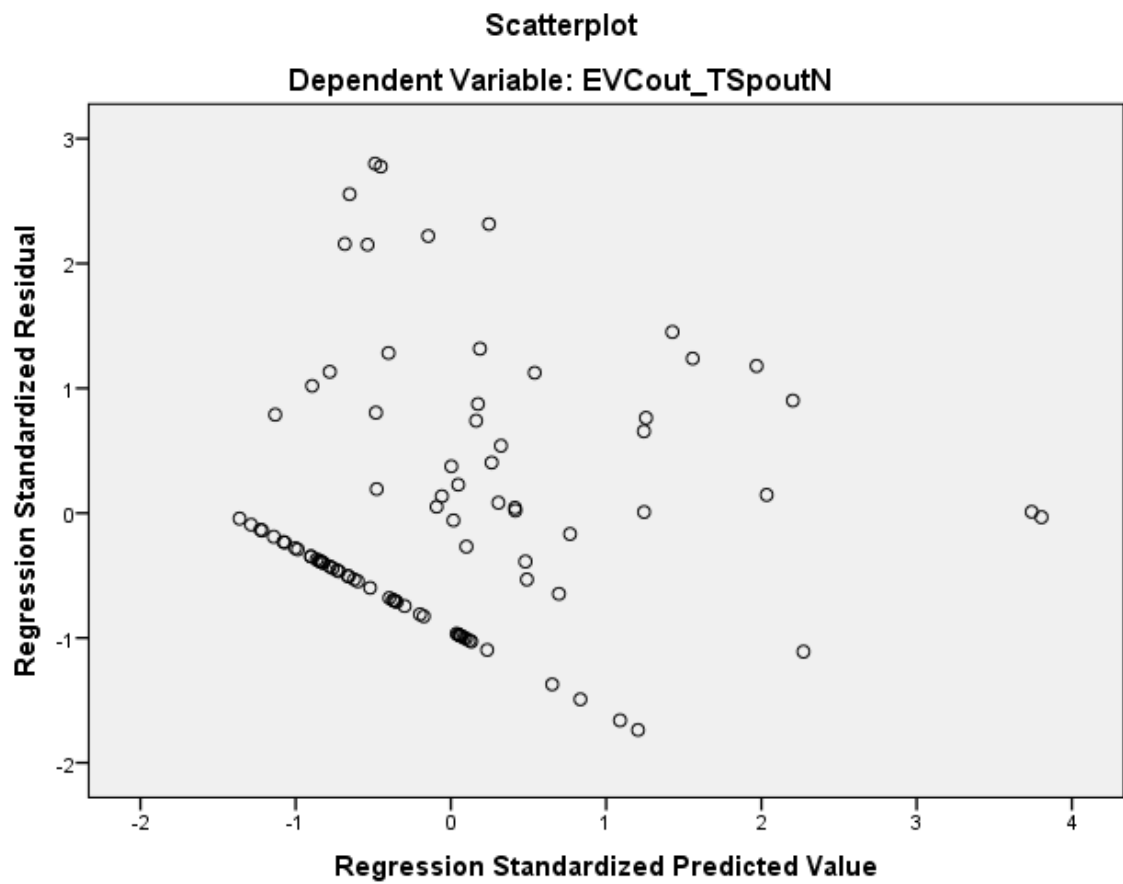
Centered Leverage Value	.000	.161	.011	.025
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# Residuals Statistics<sup>a</sup>

	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: 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		06-JUN-2015 12:01:13
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 PL_TpoutN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.22
	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	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	.260 <sup>a</sup>	.068	.057	.00885529040 6860

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	6.475	.013 <sup>b</sup>
	Residual	.007	89	.000		

Total	.007	90			
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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)	.006	.002		2.729	.008
	GD_d	.458	.180	.260	2.545	.013

**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	-.168 <sup>b</sup>	-1.231	.222	-.130	.556	1.798
	TSpaths_d	-.083 <sup>b</sup>	-.706	.482	-.075	.762	1.312
	AvgPL_d	-.359 <sup>b</sup>	-1.900	.061	-.199	.285	3.511
	AvgGL_d	-.159 <sup>b</sup>	-.952	.344	-.101	.376	2.660

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376

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	1.905	1.000	.05	.05
	2	.095	4.482	.95	.95

a. Dependent Variable: PL\_TpoutN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00801182724 5355	.02032654173 6722	.01098901098 9011	.00237517109 0398
Std. Predicted Value	-1.253	3.931	.000	1.000
Standard Error of Predicted Value	.001	.004	.001	.000
Adjusted Predicted Value	.00751677388 3253	.02264445088 8038	.01103944098 6659	.00255030001 7629
Residual	- .01211673207 5810	.01690796390 1758	.00000000000 0000	.00880595692 8816
Std. Residual	-1.368	1.909	.000	.994
Stud. Residual	-1.378	1.937	-.003	1.006
Deleted Residual	- .01268603838 9802	.01740301586 6876	- .00005042999 7648	.00901414125 0428
Stud. Deleted Residual	-1.385	1.968	-.002	1.009
Mahal. Distance	.152	15.455	.989	2.118
Cook's Distance	.000	.187	.012	.023

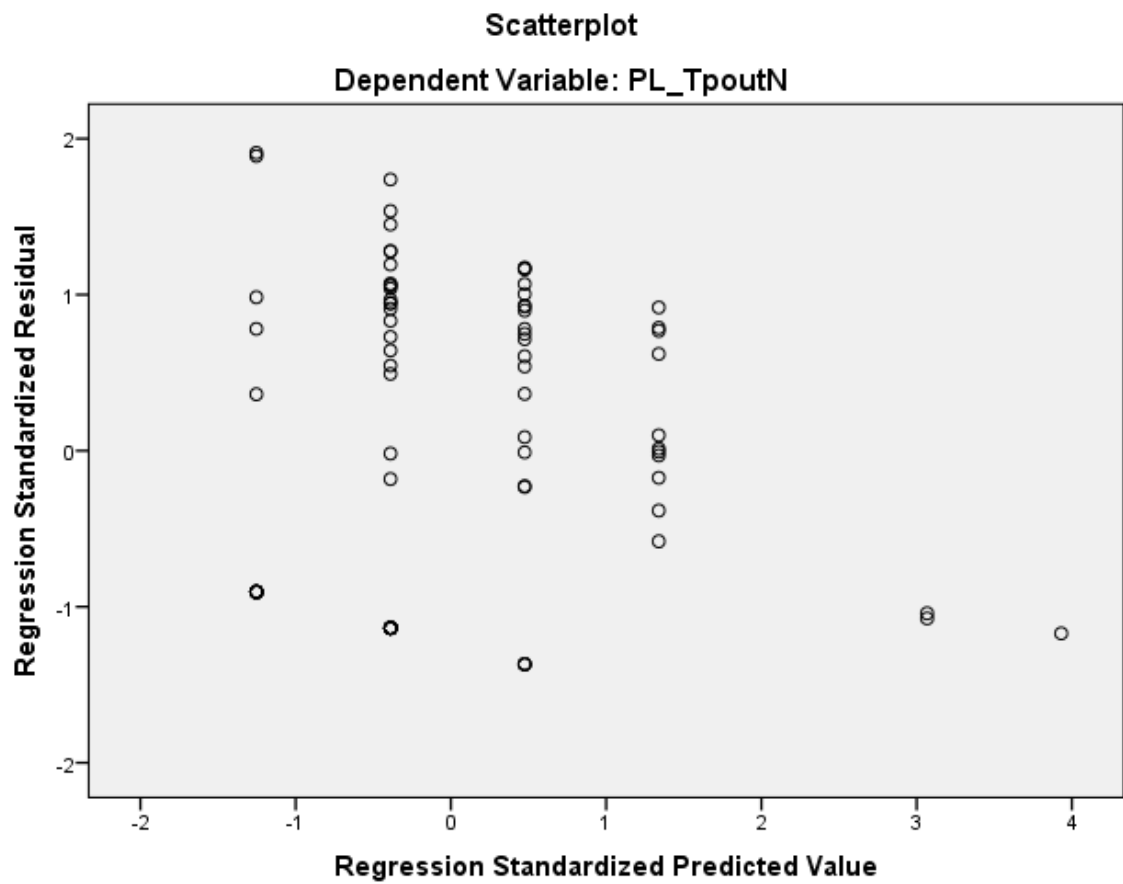
Centered Leverage Value	.002	.172	.011	.024
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#### Residuals Statistics<sup>a</sup>

	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\_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		06-JUN-2015 12:01:32
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 PL_TSpoutN
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.16
	Memory Required	5952 bytes
	Additional Memory	
	Required for Residual	0 bytes
Variables Created or Modified	Plots	
	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	.212 <sup>a</sup>	.045	.034	.009152480238818

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	.000	1	.000	4.186	.044 <sup>b</sup>
	Residual	.007	89	.000		

Total	.008	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)	.007	.002		3.017	.003
GD_d	.380	.186	.212	2.046	.044

**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	-.204 <sup>b</sup>	-1.481	.142	-.156	.556	1.798
	TSpaths_d	-.142 <sup>b</sup>	-1.200	.233	-.127	.762	1.312
	AvgPL_d	-.308 <sup>b</sup>	-1.602	.113	-.168	.285	3.511
	AvgGL_d	-.179 <sup>b</sup>	-1.060	.292	-.112	.376	2.660

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.556
	TSpaths_d	.762
	AvgPL_d	.285
	AvgGL_d	.376

a. Dependent Variable: PL\_TSpoutN

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	1.905	1.000	.05	.05
	2	.095	4.482	.95	.95

a. Dependent Variable: PL\_TSpoutN

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00851479358 9711	.01874905638 3967	.01098901098 9011	.00197390887 9337
Std. Predicted Value	-1.253	3.931	.000	1.000
Standard Error of Predicted Value	.001	.004	.001	.000
Adjusted Predicted Value	.00806987192 4818	.02038770541 5487	.01103227517 2061	.00210024204 2862
Residual	- .01363192498 6839	.01590364240 1099	.00000000000 0000	.00910149109 4232
Std. Residual	-1.489	1.738	.000	.994
Stud. Residual	-1.513	1.749	-.002	1.004
Deleted Residual	- .01406669989 2282	.01610777899 6229	- .00004326418 3050	.00928453328 9908
Stud. Deleted Residual	-1.524	1.770	-.001	1.008
Mahal. Distance	.152	15.455	.989	2.118
Cook's Distance	.000	.088	.010	.012

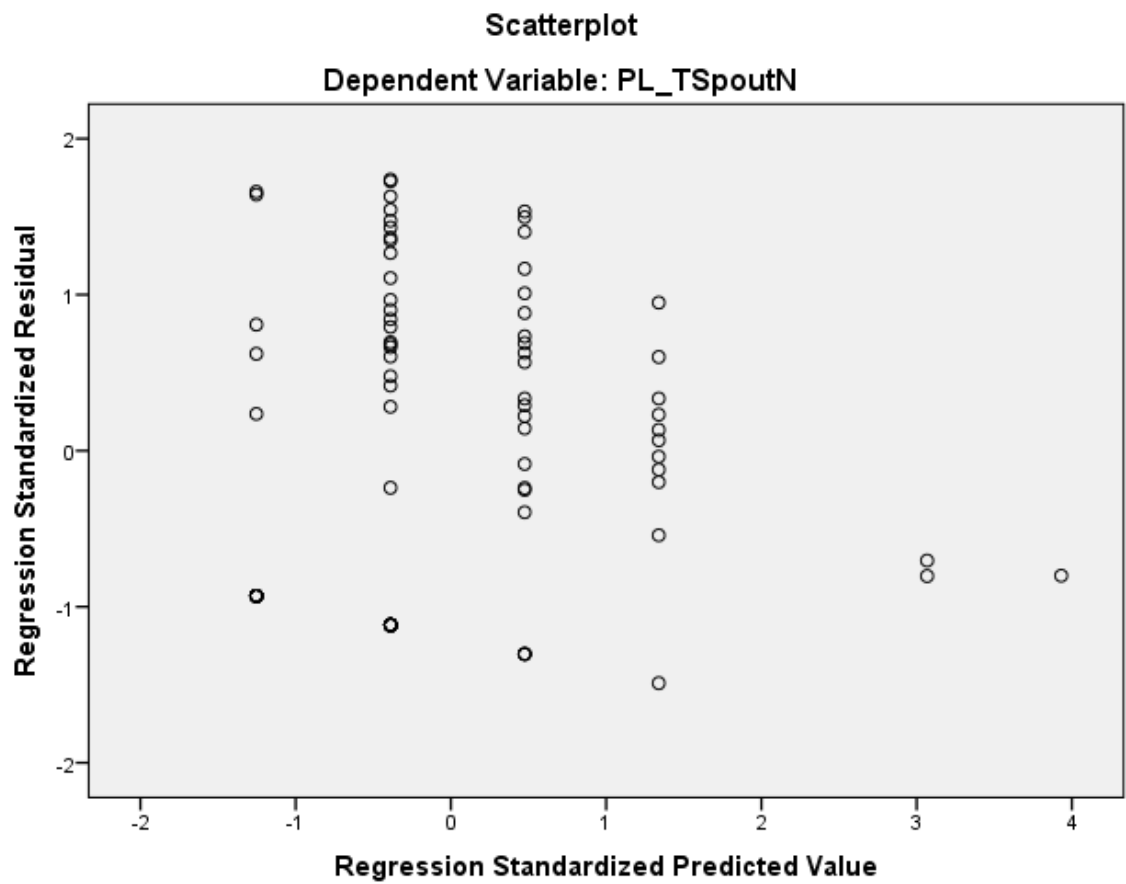
Centered Leverage Value	.002	.172	.011	.024
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#### Residuals Statistics<sup>a</sup>

	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\_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

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	Weight	<none>
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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 S_pro
		/METHOD=STEPWISE GD_d
		Tpaths_d TSpaths_d AvgPL_d
		AvgGL_d
		/SCATTERPLOT=(*ZRESID
		,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.18
	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	AvgPL_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	Tpaths_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4		AvgPL_d	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_pro

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518 <sup>a</sup>	.268	.260	.01628227948 7381
2	.555 <sup>b</sup>	.308	.292	.01591811256 4087
3	.614 <sup>c</sup>	.377	.356	.01518776404 0454
4	.614 <sup>d</sup>	.376	.362	.01511226431 9767

a. Predictors: (Constant), AvgPL\_d

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

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

d. Predictors: (Constant), TSpaths\_d, Tpaths\_d

e. Dependent Variable: S\_pro

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.009	1	.009	32.579	.000 <sup>b</sup>
	Residual	.024	89	.000		

	Total	.032	90			
2	Regression	.010	2	.005	19.603	.000 <sup>c</sup>
	Residual	.022	88	.000		
	Total	.032	90			
3	Regression	.012	3	.004	17.578	.000 <sup>d</sup>
	Residual	.020	87	.000		
	Total	.032	90			
4	Regression	.012	2	.006	26.567	.000 <sup>e</sup>
	Residual	.020	88	.000		
	Total	.032	90			

a. Dependent Variable: S\_pro

b. Predictors: (Constant), AvgPL\_d

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

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

e. Predictors: (Constant), TSpats\_d, Tpaths\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.007	.004		-1.980	.051

	AvgPL_d	1.650	.289	.518	5.708	.000
2	(Constant)	.020	.012		1.598	.114
	AvgPL_d	2.087	.342	.655	6.096	.000
	TSpaths_d	-2.901	1.282	-.243	-2.262	.026
3	(Constant)	.023	.012		1.963	.053
	AvgPL_d	-.297	.834	-.093	-.357	.722
	TSpaths_d	-17.542	4.865	-1.470	-3.605	.001
	Tpaths_d	16.704	5.372	1.781	3.109	.003
4	(Constant)	.024	.012		1.990	.050
	TSpaths_d	-16.093	2.665	-1.349	-6.038	.000
	Tpaths_d	14.941	2.095	1.593	7.132	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_d	1.000	1.000
2	(Constant)		
	AvgPL_d	.681	1.468
	TSpaths_d	.681	1.468
3	(Constant)		
	AvgPL_d	.105	9.560
	TSpaths_d	.043	23.226

	Tpaths_d	.022	45.835
4	(Constant)		
	TSpaths_d	.142	7.039
	Tpaths_d	.142	7.039

a. Dependent Variable: S\_pro

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	.091 <sup>b</sup>	.532	.596	.057	.285	3.511
	Tpaths_d	-.218 <sup>b</sup>	-1.420	.159	-.150	.345	2.897
	TSpaths_d	-.243 <sup>b</sup>	-2.262	.026	-.234	.681	1.468
	AvgGL_d	-.074 <sup>b</sup>	-.353	.725	-.038	.190	5.273
2	GD_d	.099 <sup>c</sup>	.596	.553	.064	.285	3.513
	Tpaths_d	1.781 <sup>c</sup>	3.109	.003	.316	.022	45.835
	AvgGL_d	.262 <sup>c</sup>	1.073	.286	.114	.131	7.615
3	GD_d	.285 <sup>d</sup>	1.723	.089	.183	.256	3.907
	AvgGL_d	1.048 <sup>d</sup>	3.927	.000	.390	.086	11.603
4	GD_d	.137 <sup>e</sup>	1.078	.284	.115	.438	2.283
	AvgGL_d	.282 <sup>e</sup>	1.775	.079	.187	.274	3.652
	AvgPL_d	-.093 <sup>e</sup>	-.357	.722	-.038	.105	9.560

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

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_d	.285
	Tpaths_d	.345
	TSpaths_d	.681
	AvgGL_d	.190
2	GD_d	.254
	Tpaths_d	.022
	AvgGL_d	.131
3	GD_d	.020
	AvgGL_d	.014
4	GD_d	.082
	AvgGL_d	.078
	AvgPL_d	.022

a. Dependent Variable: S\_pro

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

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

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

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



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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgPL_d	TSpaths_d
1	1	1.881	1.000	.06	.06	
	2	.119	3.974	.94	.94	
2	1	2.855	1.000	.00	.02	.00
	2	.138	4.554	.03	.74	.01
	3	.008	19.082	.97	.24	.99
3	1	3.850	1.000	.00	.00	.00
	2	.139	5.259	.03	.12	.00
	3	.010	19.256	.93	.08	.02
	4	.000	99.416	.04	.79	.98
4	1	2.981	1.000	.00		.00
	2	.018	13.028	.64		.01
	3	.002	41.073	.36		.99

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

Model	Dimension	Variance Proportions
		Tpaths_d
1	1	
	2	
2	1	

3	2	
	3	
	1	.00
	2	.00
	3	.01
4	4	.99
	1	.00
	2	.08
	3	.92

a. Dependent Variable: S\_pro

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00339328614 0636	.09139581769 7048	.01098901098 9011	.01161157003 1185
Std. Predicted Value	-1.239	6.925	.000	1.000
Standard Error of Predicted Value	.002	.011	.002	.001
Adjusted Predicted Value	- .00431386381 3877	.08135501295 3281	.01074807010 7846	.01027702899 6174

Residual	- .05344206094 7418	.06319853663 4445	.00000000000 0000	.01494340690 4646
Std. Residual	-3.536	4.182	.000	.989
Stud. Residual	-4.098	4.205	.006	1.052
Deleted Residual	- .07175779342 6514	.07574428617 9543	.00024094088 1165	.01745895643 8446
Stud. Deleted Residual	-4.529	4.678	.014	1.113
Mahal. Distance	.011	47.969	1.978	6.056
Cook's Distance	.000	4.555	.075	.516
Centered Leverage Value	.000	.533	.022	.067

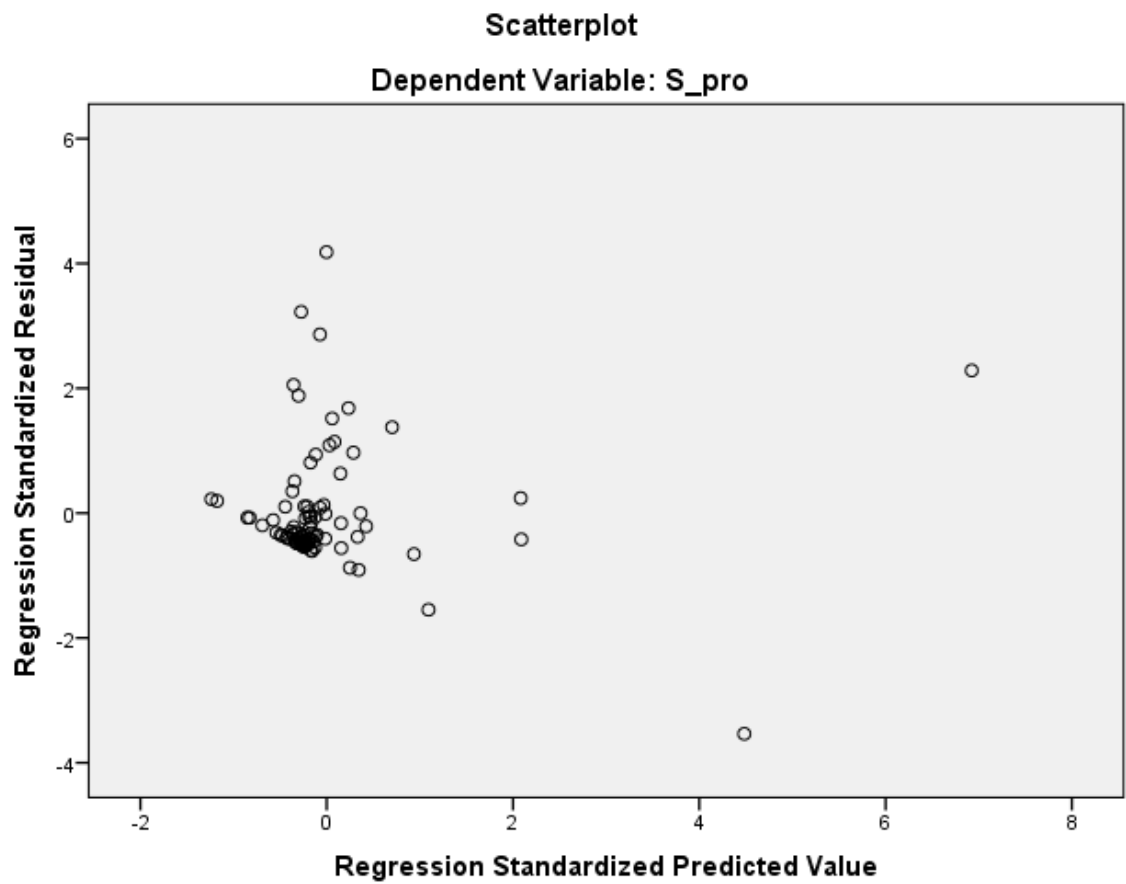
**Residuals Statistics<sup>a</sup>**

	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 TSpats\_d AvgPL\_d AvgGL\_d

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

/SAVE COOK.

## Regression

### Notes

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	DataSet6

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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 R_pro</p> <p>/METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d</p> <p>/SCATTERPLOT=(*ZRESID ,*ZPRED)</p> <p>/SAVE COOK.</p>
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	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	TSpaths_d		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	AvgPL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
5	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: R\_pro

#### Model Summary<sup>f</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.586 <sup>a</sup>	.343	.336	.00203803091 2729
2	.622 <sup>b</sup>	.387	.373	.00197962979 5039
3	.658 <sup>c</sup>	.433	.413	.00191508191 8706
4	.686 <sup>d</sup>	.471	.447	.00186004462 9425
5	.737 <sup>e</sup>	.543	.516	.00173943420 2896

a. Predictors: (Constant), GD\_d

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

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

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

e. Predictors: (Constant), GD\_d, TSpaths\_d, Tpaths\_d, AvgPL\_d,  
AvgGL\_d

f. Dependent Variable: R\_pro

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	46.467	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.001	90			

2	Regression	.000	2	.000	27.789	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.001	90			
3	Regression	.000	3	.000	22.140	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.001	90			
4	Regression	.000	4	.000	19.158	.000 <sup>e</sup>
	Residual	.000	86	.000		
	Total	.001	90			
5	Regression	.000	5	.000	20.194	.000 <sup>f</sup>
	Residual	.000	85	.000		
	Total	.001	90			

a. Dependent Variable: R\_pro

b. Predictors: (Constant), GD\_d

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

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

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

f. Predictors: (Constant), GD\_d, TSpaths\_d, Tpaths\_d, AvgPL\_d, AvgGL\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.008	.001		15.695	.000
	GD_d	.282	.041	.586	6.817	.000
2	(Constant)	.011	.001		7.665	.000
	GD_d	.339	.046	.703	7.353	.000
	TSpaths_d	-.379	.151	-.240	-2.516	.014
3	(Constant)	.013	.002		8.352	.000
	GD_d	.237	.059	.492	4.034	.000
	TSpaths_d	-1.311	.381	-.832	-3.446	.001
	Tpaths_d	.929	.350	.749	2.652	.010
4	(Constant)	.012	.001		8.334	.000
	GD_d	.357	.075	.741	4.783	.000
	TSpaths_d	-2.577	.628	-1.634	-4.106	.000
	Tpaths_d	2.438	.694	1.967	3.513	.001
	AvgPL_d	-.333	.134	-.791	-2.495	.015
5	(Constant)	.011	.001		8.218	.000
	GD_d	.375	.070	.778	5.356	.000
	TSpaths_d	-4.475	.784	-2.838	-5.708	.000
	Tpaths_d	4.121	.796	3.325	5.177	.000
	AvgPL_d	-.870	.193	-2.065	-4.511	.000
	AvgGL_d	.807	.221	.915	3.652	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.762	1.312
	TSpaths_d	.762	1.312
3	(Constant)		
	GD_d	.438	2.283
	TSpaths_d	.112	8.934
	Tpaths_d	.082	12.246
4	(Constant)		
	GD_d	.256	3.907
	TSpaths_d	.039	25.763
	Tpaths_d	.020	50.982
	AvgPL_d	.061	16.363
5	(Constant)		
	GD_d	.255	3.926
	TSpaths_d	.022	45.962
	Tpaths_d	.013	76.686
	AvgPL_d	.026	38.976
	AvgGL_d	.086	11.660

a. Dependent Variable: R\_pro

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.150 <sup>b</sup>	-1.307	.195	-.138	.556	1.798
	TSpaths_d	-.240 <sup>b</sup>	-2.516	.014	-.259	.762	1.312
	AvgPL_d	.032 <sup>b</sup>	.199	.843	.021	.285	3.511
	AvgGL_d	-.070 <sup>b</sup>	-.495	.622	-.053	.376	2.660
2	Tpaths_d	.749 <sup>c</sup>	2.652	.010	.273	.082	12.246
	AvgPL_d	.180 <sup>c</sup>	1.088	.279	.116	.254	3.931
	AvgGL_d	.214 <sup>c</sup>	1.261	.211	.134	.240	4.173
3	AvgPL_d	-.791 <sup>d</sup>	-2.495	.015	-.260	.061	16.363
	AvgGL_d	.054 <sup>d</sup>	.302	.763	.033	.204	4.895
4	AvgGL_d	.915 <sup>e</sup>	3.652	.000	.368	.086	11.660

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	Tpaths_d		.556
	TSpaths_d		.762

	AvgPL_d	.285
	AvgGL_d	.376
2	Tpaths_d	.082
	AvgPL_d	.254
	AvgGL_d	.240
3	AvgPL_d	.020
	AvgGL_d	.070
4	AvgGL_d	.013

a. Dependent Variable: R\_pro

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

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

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	GD_d	TSpaths_d
1	1	1.905	1.000	.05	.05	
	2	.095	4.482	.95	.95	
2	1	2.881	1.000	.00	.02	.00
	2	.111	5.106	.04	.83	.01

	3	.009	18.166	.96	.15	.98
3	1	3.872	1.000	.00	.00	.00
	2	.113	5.858	.03	.51	.00
	3	.014	16.909	.72	.17	.02
	4	.001	55.951	.25	.31	.98
4	1	4.775	1.000	.00	.00	.00
	2	.181	5.135	.02	.06	.00
	3	.033	11.994	.01	.79	.00
	4	.010	21.816	.94	.04	.02
	5	.000	117.132	.03	.11	.98
5	1	5.767	1.000	.00	.00	.00
	2	.181	5.643	.02	.06	.00
	3	.034	12.954	.02	.80	.00
	4	.010	23.955	.94	.04	.01
	5	.007	28.524	.02	.01	.00
	6	.000	166.772	.00	.09	.99

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

Model	Dimension	Variance Proportions		
		Tpaths_d	AvgPL_d	AvgGL_d
1	1			
	2			
2	1			

	2			
	3			
3	1	.00		
	2	.00		
	3	.06		
	4	.94		
4	1	.00	.00	
	2	.00	.03	
	3	.00	.15	
	4	.01	.09	
	5	.99	.73	
5	1	.00	.00	.00
	2	.00	.01	.00
	3	.00	.05	.01
	4	.01	.05	.00
	5	.01	.05	.58
	6	.99	.84	.42

a. Dependent Variable: R\_pro

# Residuals Statistics<sup>a</sup>

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



Predicted Value	.00564073957 5028	.02180889248 8480	.01098901098 9011	.00184237495 5625
Std. Predicted Value	-2.903	5.873	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00383642292 5815	.01812511309 9813	.01089169330 9667	.00187995502 6410
Residual	- .00404278188 9439	.00378034776 0767	.00000000000 0000	.00169042619 3556
Std. Residual	-2.324	2.173	.000	.972
Stud. Residual	-2.761	2.616	.017	1.052
Deleted Residual	- .00570655521 0054	.00929202046 2453	.00009731767 9344	.00214288181 3055
Stud. Deleted Residual	-2.877	2.712	.017	1.069
Mahal. Distance	.223	67.425	4.945	10.841
Cook's Distance	.000	3.615	.068	.395
Centered Leverage Value	.002	.749	.055	.120

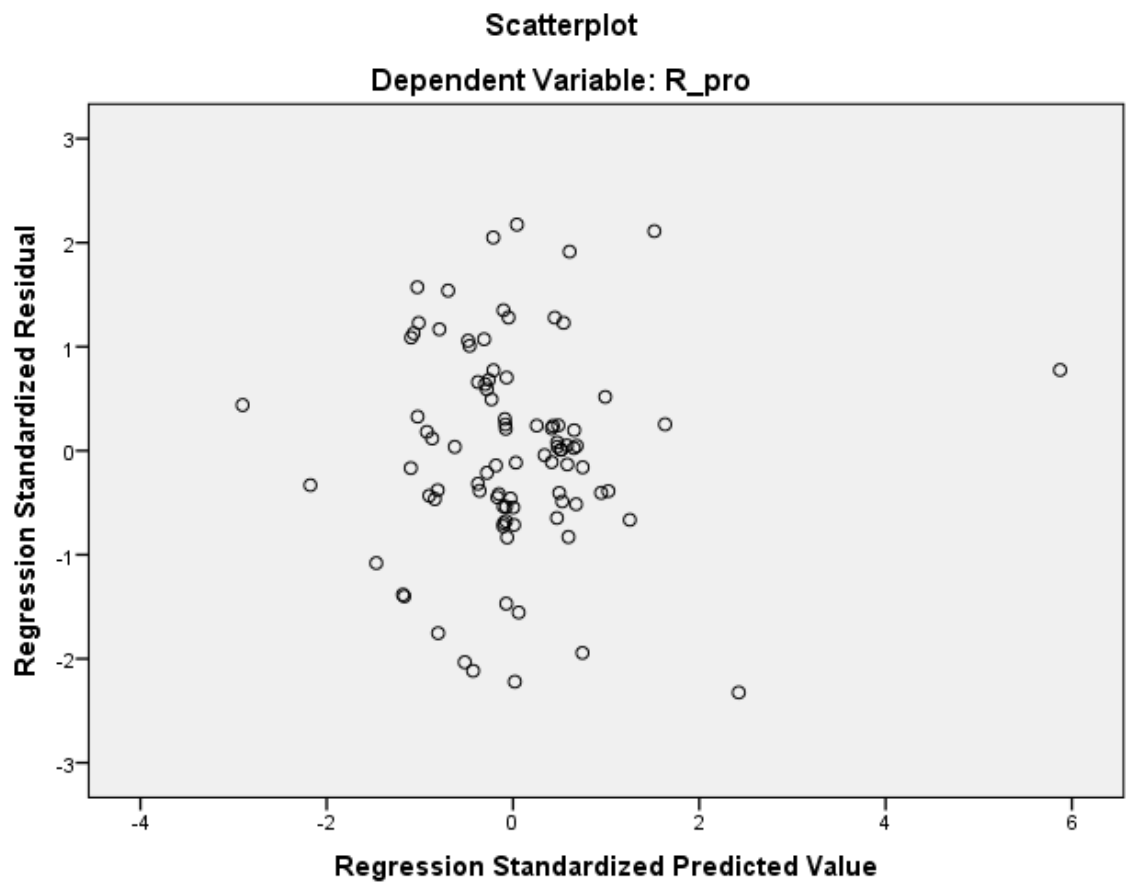
#### Residuals Statistics<sup>a</sup>

	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 TSpats\_d AvgPL\_d AvgGL\_d

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

/SAVE COOK.

## Regression

### Notes

Output Created		06-JUN-2015 12:02:33
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 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	00:00:00.17
	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	AvgPL_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	AvgGL_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: SMSP\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
-------	---	----------	-------------------	----------------------------

1	.682 <sup>a</sup>	.465	.459	.05647960211 4532
2	.725 <sup>b</sup>	.526	.515	.05343804021 5947
3	.755 <sup>c</sup>	.570	.556	.05116550526 5364

a. Predictors: (Constant), AvgPL\_d

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

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

d. Dependent Variable: SMSP\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.246	1	.246	77.207	.000 <sup>b</sup>
	Residual	.284	89	.003		
	Total	.530	90			
2	Regression	.279	2	.139	48.833	.000 <sup>c</sup>
	Residual	.251	88	.003		
	Total	.530	90			
3	Regression	.302	3	.101	38.508	.000 <sup>d</sup>
	Residual	.228	87	.003		

Total	.530	90			
-------	------	----	--	--	--

a. Dependent Variable: SMSP\_d

b. Predictors: (Constant), AvgPL\_d

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

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

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.086	.013		-6.862	.000
	AvgPL_d	8.810	1.003	.682	8.787	.000
2	(Constant)	-.066	.013		-5.012	.000
	AvgPL_d	13.890	1.778	1.075	7.814	.000
	GD_d	-6.873	2.034	-.465	-3.379	.001
3	(Constant)	.015	.030		.491	.625
	AvgPL_d	19.027	2.415	1.472	7.879	.000
	GD_d	-6.147	1.962	-.416	-3.133	.002
	AvgGL_d	-13.208	4.405	-.488	-2.998	.004

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



Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_d	1.000	1.000
2	(Constant)		
	AvgPL_d	.285	3.511
	GD_d	.285	3.511
3	(Constant)		
	AvgPL_d	.141	7.068
	GD_d	.280	3.565
	AvgGL_d	.187	5.354

a. Dependent Variable: SMSP\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_d	-.465 <sup>b</sup>	-3.379	.001	-.339	.285	3.511
	Tpaths_d	-.017 <sup>b</sup>	-.128	.899	-.014	.345	2.897
	TSpaths_d	-.136 <sup>b</sup>	-1.461	.148	-.154	.681	1.468
	AvgGL_d	-.550 <sup>b</sup>	-3.252	.002	-.328	.190	5.273

2	Tpaths_d	-.041 <sup>c</sup>	-.329	.743	-.035	.344	2.907
	TSpaths_d	-.130 <sup>c</sup>	-1.467	.146	-.155	.681	1.469
	AvgGL_d	-.488 <sup>c</sup>	-2.998	.004	-.306	.187	5.354
3	Tpaths_d	.136 <sup>d</sup>	1.027	.307	.110	.282	3.548
	TSpaths_d	.018 <sup>d</sup>	.174	.862	.019	.470	2.127

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

Model	Collinearity Statistics	
	Minimum Tolerance	
1	GD_d	.285
	Tpaths_d	.345
	TSpaths_d	.681
	AvgGL_d	.190
2	Tpaths_d	.176
	TSpaths_d	.254
	AvgGL_d	.141
3	Tpaths_d	.131
	TSpaths_d	.129

a. Dependent Variable: SMSP\_d

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

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

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgPL_d	GD_d
1	1	1.881	1.000	.06	.06	
	2	.119	3.974	.94	.94	
2	1	2.836	1.000	.02	.01	.01
	2	.133	4.612	.90	.12	.03
	3	.030	9.644	.08	.88	.96
3	1	3.821	1.000	.00	.00	.00
	2	.138	5.262	.13	.07	.05
	3	.033	10.761	.00	.30	.95
	4	.008	22.375	.87	.63	.00

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

Model	Dimension	Variance Proportions
		AvgGL_d
1	1	
	2	
2	1	
	2	

	3	
3	1	.00
	2	.00
	3	.02
	4	.97

a. Dependent Variable: SMSP\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .03633873909 7118	.33855581283 5693	.01098901098 9011	.05796868096 6299
Std. Predicted Value	-.816	5.651	.000	1.000
Standard Error of Predicted Value	.006	.031	.010	.005
Adjusted Predicted Value	- .04154562205 0762	.32810547947 8836	.01020616170 6738	.05576714905 8079
Residual	- .24168722331 5239	.34399494528 7704	.00000000000 0000	.05030551955 8904
Std. Residual	-4.724	6.723	.000	.983
Stud. Residual	-5.394	7.961	.007	1.121

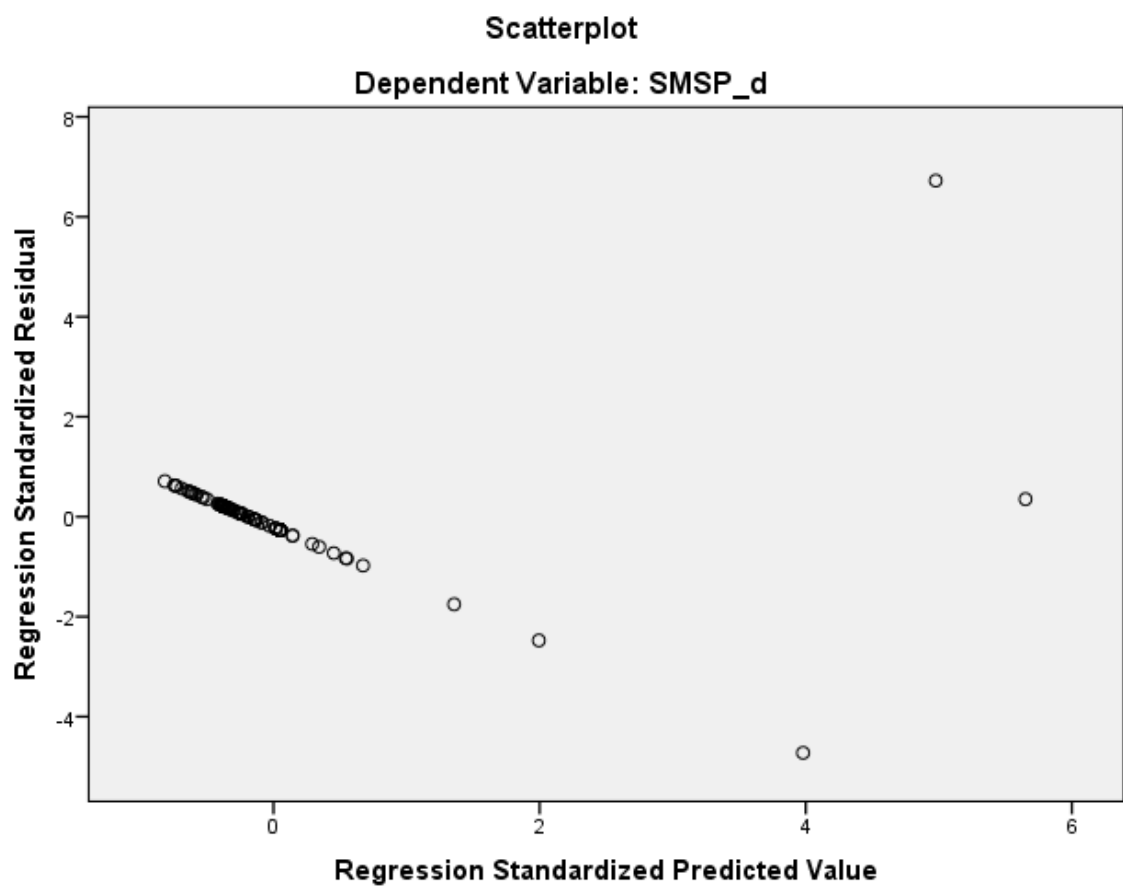
Deleted Residual	- .31515488028 5263	.48237925767 8986	.00078284928 2273	.06576108331 1082
Stud. Deleted Residual	-6.574	15.193	.072	1.809
Mahal. Distance	.153	32.126	2.967	5.099
Cook's Distance	.000	6.375	.098	.705
Centered Leverage Value	.002	.357	.033	.057

**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_pro
/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	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 S_pro  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	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	GD_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_pro

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.354 <sup>a</sup>	.125	.115	.01371606242 1165

a. Predictors: (Constant), GD\_d

b. Dependent Variable: S\_pro

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	12.338	.001 <sup>b</sup>
	Residual	.016	86	.000		
	Total	.019	87			

a. Dependent Variable: S\_pro

b. Predictors: (Constant), GD\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.004	.004		-.893	.374
	GD_d	1.257	.358	.354	3.513	.001

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

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

a. Dependent Variable: S\_pro

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.128 <sup>b</sup>	-1.104	.273	-.119	.751	1.332
	TSpaths_d	-.158 <sup>b</sup>	-1.449	.151	-.155	.846	1.182
	AvgPL_d	.107 <sup>b</sup>	.652	.516	.071	.378	2.647
	AvgGL_d	.058 <sup>b</sup>	.431	.667	.047	.572	1.747

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	Tpaths_d	.751	
	TSpaths_d	.846	
	AvgPL_d	.378	
	AvgGL_d	.572	

a. Dependent Variable: S\_pro

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	1.931	1.000	.03	.03
	2	.069	5.277	.97	.97

a. Dependent Variable: S\_pro

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00206682714 6336	.01897283829 7486	.00949522579 6459	.00516525704 1070
Std. Predicted Value	-1.438	1.835	.000	1.000
Standard Error of Predicted Value	.002	.003	.002	.001
Adjusted Predicted Value	.00178347935 4344	.01995810307 5624	.00950426197 9061	.00519110486 4950
Residual	- .01869554631 4120	.05517996102 5715	.00000000000 0000	.01363700664 7883
Std. Residual	-1.363	4.023	.000	.994
Stud. Residual	-1.398	4.128	.000	1.008
Deleted Residual	- .01968080922 9612	.05808797106 1468	- .00000903618 2601	.01402693117 5042

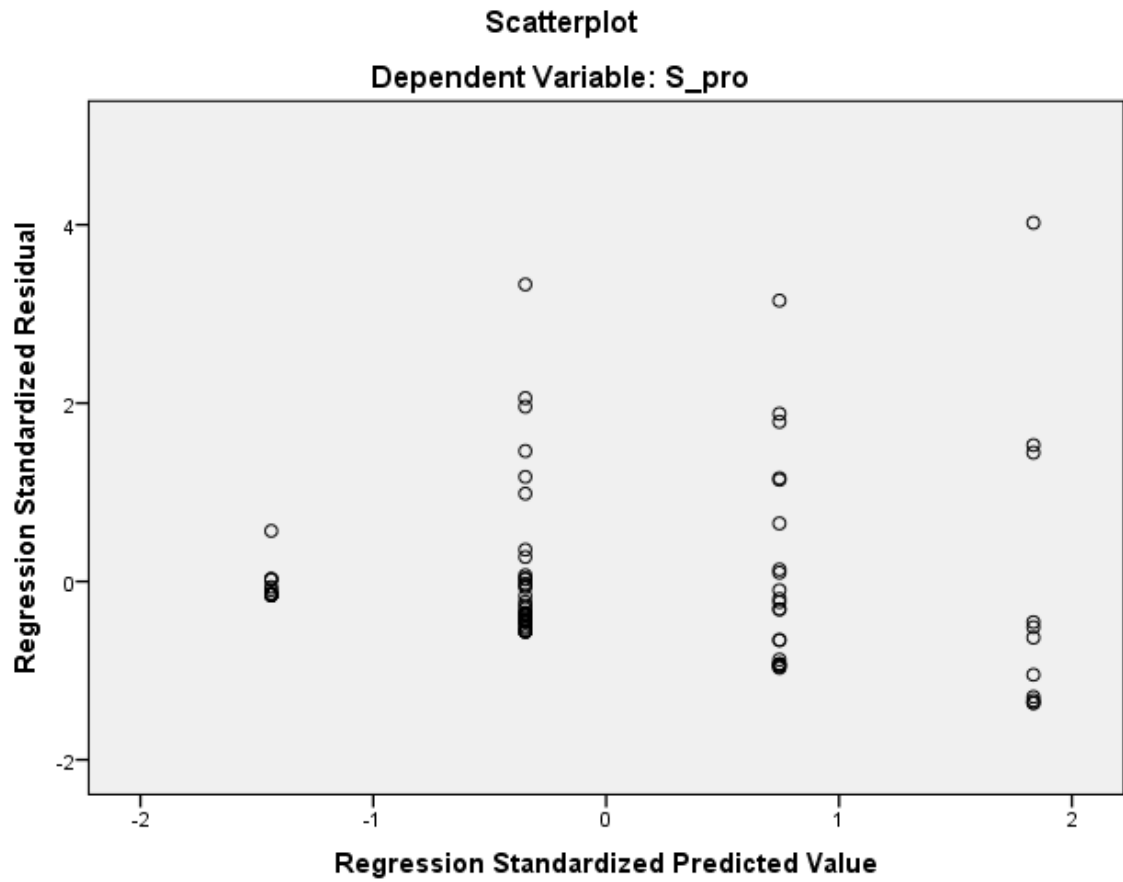
Stud. Deleted Residual	-1.406	4.583	.012	1.049
Mahal. Distance	.121	3.367	.989	1.147
Cook's Distance	.000	.449	.014	.050
Centered Leverage Value	.001	.039	.011	.013

**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: 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

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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.

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 R_pro  /METHOD=STEPWISE GD_d Tpaths_d TSpats_d AvgPL_d AvgGL_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.17
	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	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\_pro

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.557 <sup>a</sup>	.310	.302	.00180726927 0547
2	.608 <sup>b</sup>	.369	.354	.00173855158 9110

a. Predictors: (Constant), GD\_d

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

c. Dependent Variable: R\_pro

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	38.720	.000 <sup>b</sup>
	Residual	.000	86	.000		
	Total	.000	87			
2	Regression	.000	2	.000	24.887	.000 <sup>c</sup>
	Residual	.000	85	.000		
	Total	.000	87			

a. Dependent Variable: R\_pro

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)	.008	.001		14.761	.000
	GD_d	.293	.047	.557	6.223	.000
2	(Constant)	.011	.001		8.373	.000
	GD_d	.348	.049	.661	7.055	.000
	TSpaths_d	-.375	.133	-.264	-2.817	.006

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_d	1.000	1.000
2	(Constant)		
	GD_d	.846	1.182
	TSpaths_d	.846	1.182

a. Dependent Variable: R\_pro

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_d	-.255 <sup>b</sup>	-2.546	.013	-.266	.751	1.332

	TSpaths_d	-.264 <sup>b</sup>	-2.817	.006	-.292	.846	1.182
	AvgPL_d	-.118 <sup>b</sup>	-.808	.421	-.087	.378	2.647
	AvgGL_d	-.139 <sup>b</sup>	-1.180	.241	-.127	.572	1.747
2	Tpaths_d	.623 <sup>c</sup>	1.134	.260	.123	.024	40.839
	AvgPL_d	.104 <sup>c</sup>	.640	.524	.070	.285	3.515
	AvgGL_d	.104 <sup>c</sup>	.707	.481	.077	.345	2.898

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

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_d	.751
	TSpaths_d	.846
	AvgPL_d	.378
	AvgGL_d	.572
2	Tpaths_d	.024
	AvgPL_d	.285
	AvgGL_d	.345

a. Dependent Variable: R\_pro

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	1.931	1.000	.03	.03	
	2	.069	5.277	.97	.97	
2	1	2.909	1.000	.00	.01	.00
	2	.082	5.944	.05	.92	.02
	3	.009	18.033	.95	.07	.98

a. Dependent Variable: R\_pro

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00650465721 2645	.01358689647 1679	.01082161694 7084	.00131501155 4091
Std. Predicted Value	-3.283	2.103	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00655015883 9673	.01368365902 4537	.01082640400 2916	.00131924868 3189
Residual	- .00357961677 9462	.00416792370 3790	.00000000000 0000	.00171845205 1307
Std. Residual	-2.059	2.397	.000	.988

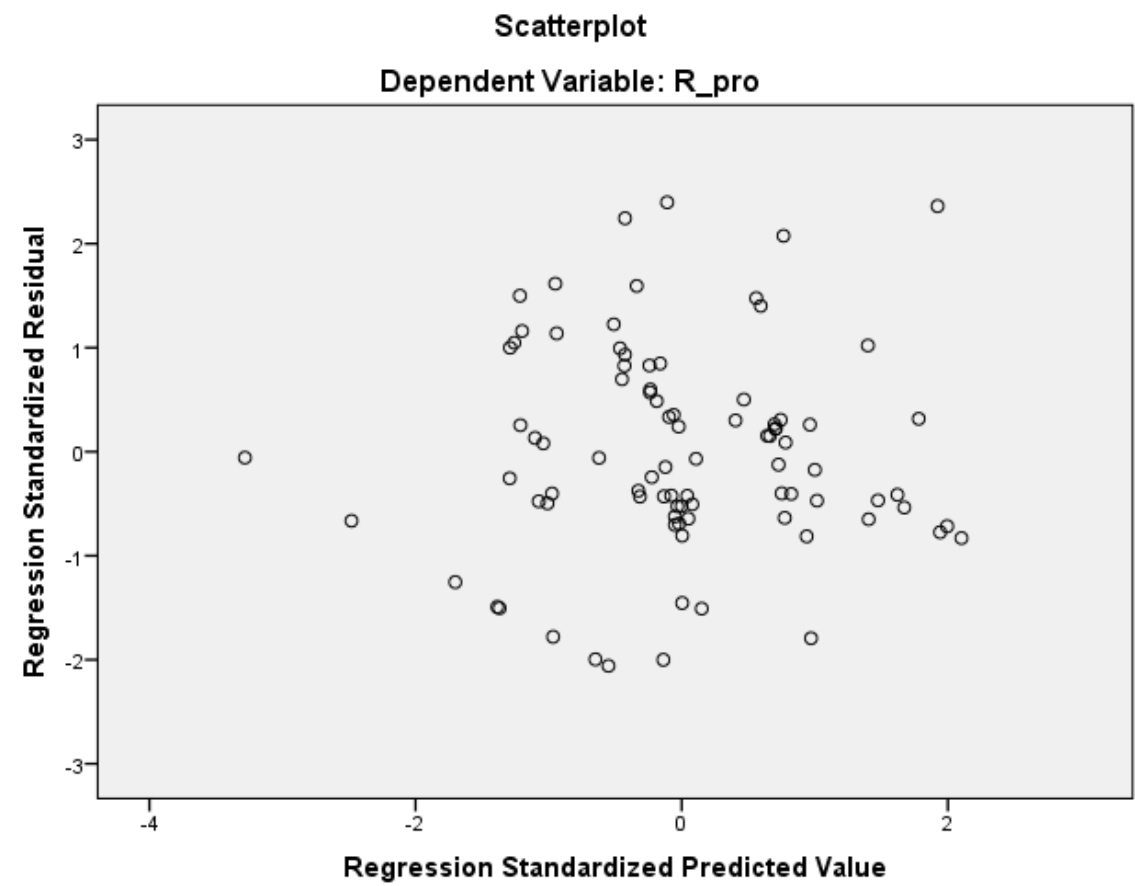
Stud. Residual	-2.076	2.428	-.001	1.007
Deleted Residual	-	.00434053875	-	.00178321289
	.00372364534	5059	.00000478705	8555
	9964		5832	
Stud. Deleted Residual	-2.118	2.502	.000	1.019
Mahal. Distance	.121	26.277	1.977	3.512
Cook's Distance	.000	.142	.013	.025
Centered Leverage Value	.001	.302	.023	.040

#### 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: 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		06-JUN-2015 12:05:13
Comments		
Input	Active Dataset	DataSet6
	Filter	<none>
	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 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	00:00:00.03
	Memory Required	6192 bytes
	Additional Memory Required for Residual Plots	0 bytes
Variables Created or Modified	COO_8	Cook's Distance

### Warnings

The dependent variable SMSP\_d is constant and has been deleted. Statistics cannot be computed.

### 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		06-JUN-2015 11:56:24
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 GD_d  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.

Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.24
	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).
2	SMSP_d		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	.586 <sup>a</sup>	.343	.336	.00422982249 1643
2	.657 <sup>b</sup>	.432	.419	.00395476801 6652

a. Predictors: (Constant), R\_pro

b. Predictors: (Constant), R\_pro, SMSP\_d

c. Dependent Variable: GD\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	46.467	.000 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			
2	Regression	.001	2	.001	33.483	.000 <sup>c</sup>
	Residual	.001	88	.000		

Total	.002	90			
-------	------	----	--	--	--

a. Dependent Variable: GD\_d

b. Predictors: (Constant), R\_pro

c. Predictors: (Constant), R\_pro, SMSP\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.002	.002		-1.179	.242
	R_pro	1.216	.178	.586	6.817	.000
2	(Constant)	-.001	.002		-.369	.713
	R_pro	1.044	.173	.503	6.034	.000
	SMSP_d	.021	.006	.310	3.716	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_pro	1.000	1.000
2	(Constant)		

R_pro	.929	1.077
SMSP_d	.929	1.077

a. Dependent Variable: GD\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.016 <sup>b</sup>	.170	.865	.018	.822	1.216
	PL_TSpoutN	-.052 <sup>b</sup>	-.545	.587	-.058	.811	1.232
	S_pro	.012 <sup>b</sup>	.087	.931	.009	.386	2.591
	SMSP_d	.310 <sup>b</sup>	3.716	.000	.368	.929	1.077
2	PL_TpoutN	.073 <sup>c</sup>	.810	.420	.087	.799	1.251
	PL_TSpoutN	-.002 <sup>c</sup>	-.025	.980	-.003	.793	1.261
	S_pro	-.068 <sup>c</sup>	-.516	.607	-.055	.376	2.662

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.822
	PL_TSpoutN	.811
	S_pro	.386

	SMSP_d	.929
2	PL_TpoutN	.743
	PL_TSpoutN	.737
	S_pro	.376

a. Dependent Variable: GD\_d

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

c. Predictors in the Model: (Constant), R\_pro, SMSP\_d

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_pro	SMSP_d
1	1	1.975	1.000	.01	.01	
	2	.025	8.950	.99	.99	
2	1	2.031	1.000	.01	.01	.02
	2	.946	1.466	.00	.00	.91
	3	.023	9.383	.99	.99	.07

a. Dependent Variable: GD\_d

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



	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00597342615 9471	.03092916682 3626	.01098901098 9011	.00341133584 4518
Std. Predicted Value	-1.470	5.845	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00587714789 4353	.03357674181 4613	.01090859134 1383	.00331427810 7082
Residual	- .00715324003 2494	.01839785091 5790	.00000000000 0000	.00391057927 7588
Std. Residual	-1.809	4.652	.000	.989
Stud. Residual	-1.821	4.701	.005	1.010
Deleted Residual	- .00724670616 9099	.01878818124 5327	.00008041964 7628	.00421335184 8446
Stud. Deleted Residual	-1.845	5.402	.014	1.053
Mahal. Distance	.021	72.350	1.978	8.359
Cook's Distance	.000	2.518	.038	.266
Centered Leverage Value	.000	.804	.022	.093

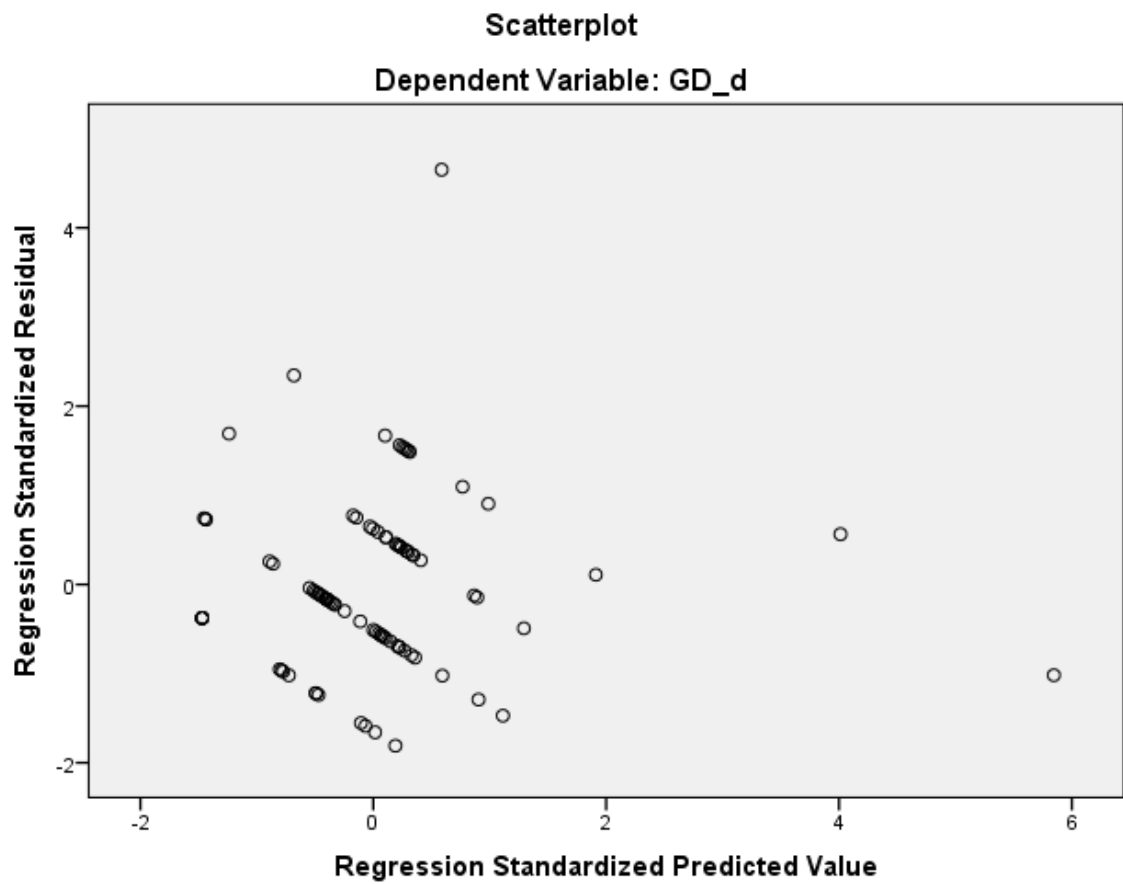
**Residuals Statistics<sup>a</sup>**

	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		06-JUN-2015 11:56:46
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 Tpaths_d  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.14
	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
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1	SMSP_d		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: Tpaths\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.546 <sup>a</sup>	.298	.290	.00170005276 8681
2	.576 <sup>b</sup>	.332	.317	.00166737229 1161

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, S\_pro

c. Dependent Variable: Tpaths\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	37.740	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	21.878	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: Tpaths\_d

b. Predictors: (Constant), SMSP\_d

c. Predictors: (Constant), SMSP\_d, S\_pro

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		60.157	.000

	SMSP_d	.014	.002	.546	6.143	.000
2	(Constant)	.011	.000		52.446	.000
	SMSP_d	.013	.002	.486	5.310	.000
	S_pro	.021	.010	.195	2.127	.036

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.906	1.104
	S_pro	.906	1.104

a. Dependent Variable: Tpaths\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.098 <sup>b</sup>	1.100	.274	.116	.999	1.001
	PL_TSpoutN	.036 <sup>b</sup>	.401	.689	.043	1.000	1.000
	S_pro	.195 <sup>b</sup>	2.127	.036	.221	.906	1.104



	R_pro	.174 <sup>b</sup>	1.910	.059	.200	.929	1.077
2	PL_TpoutN	.065 <sup>c</sup>	.733	.465	.078	.964	1.037
	PL_TSpoutN	.001 <sup>c</sup>	.011	.991	.001	.964	1.037
	R_pro	.064 <sup>c</sup>	.452	.652	.048	.385	2.596

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.999
	PL_TSpoutN	1.000
	S_pro	.906
	R_pro	.929
2	PL_TpoutN	.874
	PL_TSpoutN	.874
	R_pro	.376

- a. Dependent Variable: Tpaths\_d
- b. Predictors in the Model: (Constant), SMSP\_d
- c. Predictors in the Model: (Constant), SMSP\_d, S\_pro

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

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

			Index	(Constant)	SMSP_d	S_pro
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	1.676	1.000	.16	.11	.18
	2	.870	1.388	.24	.72	.01
	3	.454	1.922	.60	.17	.81

a. Dependent Variable: Tpaths\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01062059868 1271	.01903994940 2213	.01098901098 9011	.00116260949 7301
Std. Predicted Value	-.317	6.925	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.01053384132 6833	.02289563789 9637	.01101970270 3810	.00142846218 6413
Residual	- .00207972433 4180	.00594496401 0268	.00000000000 0000	.00164874184 8418
Std. Residual	-1.247	3.565	.000	.989
Stud. Residual	-1.256	3.592	-.004	1.006

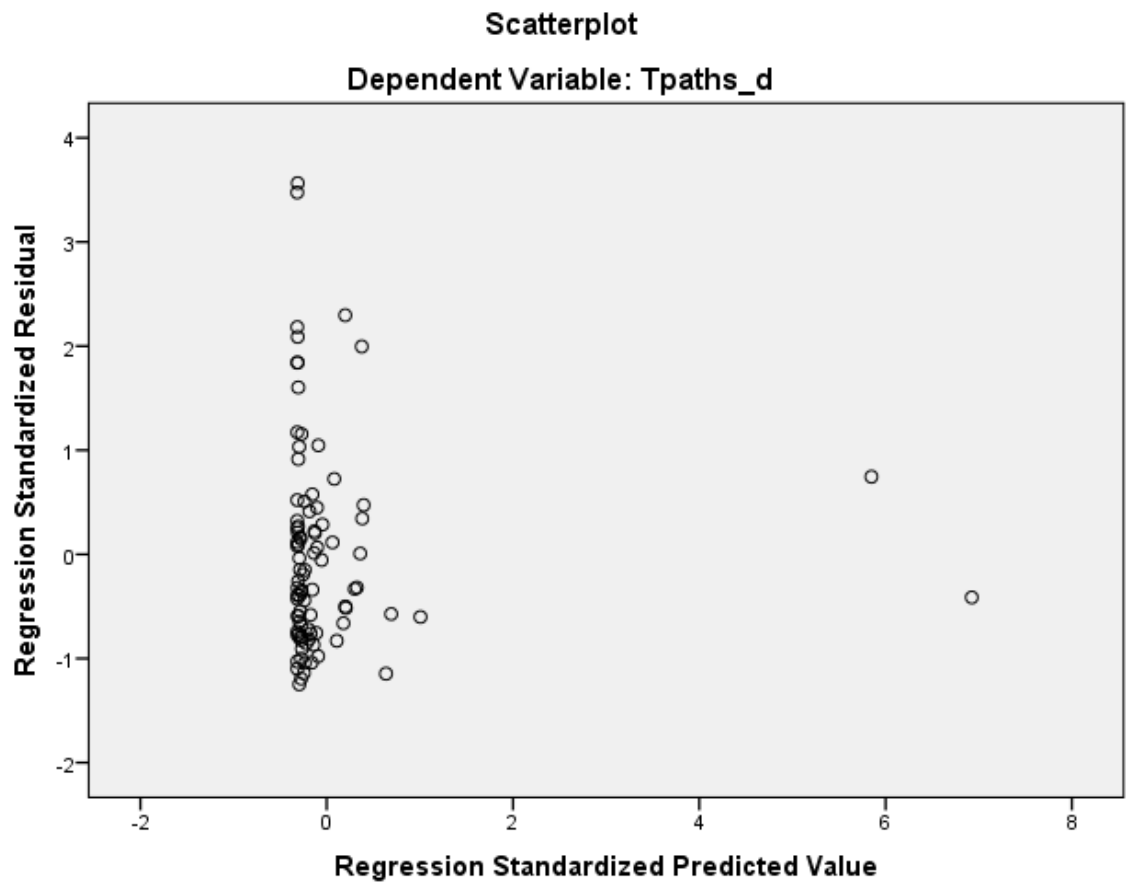
Deleted Residual	- .00454422738 4031	.00603273510 9329	- .00003069171 4799	.00175925543 8957
Stud. Deleted Residual	-1.260	3.866	.005	1.033
Mahal. Distance	.020	75.374	1.978	9.186
Cook's Distance	.000	2.101	.033	.223
Centered Leverage Value	.000	.837	.022	.102

**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	06-JUN-2015 11:57:09	
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 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	00:00:00.25
	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	SMSP_d		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: TSpats\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.292 <sup>a</sup>	.085	.075	.00152521553 7620

a. Predictors: (Constant), SMSP\_d

b. Dependent Variable: TSpats\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	8.290	.005 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			

a. Dependent Variable: TSpaths\_d

b. Predictors: (Constant), SMSP\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		67.619	.000
	SMSP_d	.006	.002	.292	2.879	.005

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	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	.073 <sup>b</sup>	.721	.473	.077	.999	1.001
	PL_TSpoutN	-.001 <sup>b</sup>	-.005	.996	-.001	1.000	1.000
	S_pro	.041 <sup>b</sup>	.384	.702	.041	.906	1.104
	R_pro	.026 <sup>b</sup>	.249	.804	.026	.929	1.077

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.999
	PL_TSpoutN	1.000
	S_pro	.906
	R_pro	.929

a. Dependent Variable: TSpaths\_d

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

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	SMSP_d
1	1	1.142	1.000	.43	.43
	2	.858	1.154	.57	.57

a. Dependent Variable: TSpaths\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01092273648 8283	.01480364054 4415	.01098901098 9011	.00046289701 4649
Std. Predicted Value	-.143	8.241	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.01085355412 2150	.01550163142 3831	.01099539178 8923	.00052320275 3218
Residual	- .00209271931 0895	.00609856937 0806	.00000000000 0000	.00151671844 9012
Std. Residual	-1.372	3.998	.000	.994
Stud. Residual	-1.380	4.021	-.001	1.001
Deleted Residual	- .00211645918 8983	.00616775173 6939	- .00000638079 9912	.00153712152 2860

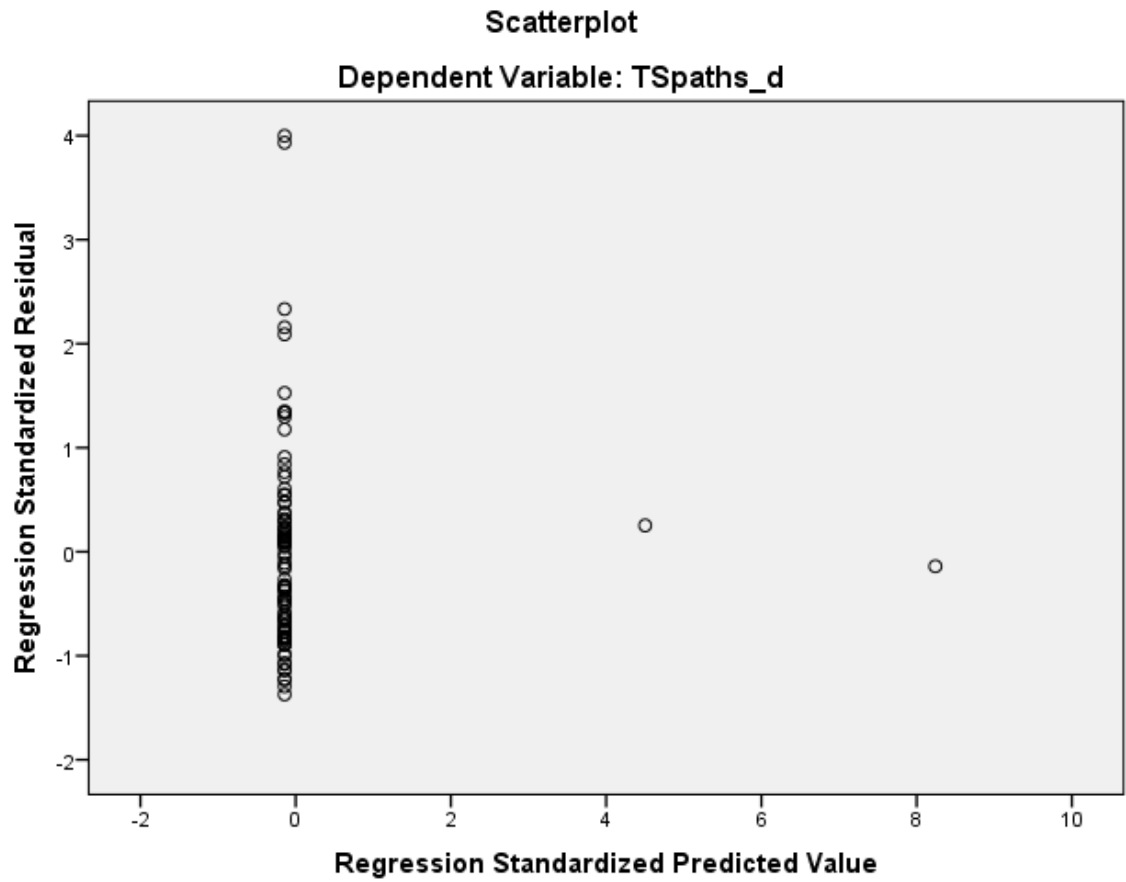
Stud. Deleted Residual	-1.387	4.420	.009	1.040
Mahal. Distance	.020	67.910	.989	7.404
Cook's Distance	.000	.137	.007	.020
Centered Leverage Value	.000	.755	.011	.082

**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	06-JUN-2015 11:57:30	
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 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 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	SMSP_d		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: AvgPL\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682 <sup>a</sup>	.465	.459	.00436926959 7991
2	.759 <sup>b</sup>	.577	.567	.00390756052 3860

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, R\_pro

c. Dependent Variable: AvgPL\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	77.207	.000 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.003	90			
2	Regression	.002	2	.001	59.902	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.003	90			

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), SMSP\_d

c. Predictors: (Constant), SMSP\_d, R\_pro

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

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



		B	Std. Error	Beta		
1	(Constant)	.010	.000		22.495	.000
	SMSP_d	.053	.006	.682	8.787	.000
2	(Constant)	.001	.002		.748	.457
	SMSP_d	.046	.006	.589	8.181	.000
	R_pro	.825	.171	.347	4.824	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.929	1.077
	R_pro	.929	1.077

a. Dependent Variable: AvgPL\_d

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.140 <sup>b</sup>	1.830	.071	.192	.999	1.001

	PL_TSpoutN	.102 <sup>b</sup>	1.317	.191	.139	1.000	1.000
	S_pro	.341 <sup>b</sup>	4.637	.000	.443	.906	1.104
	R_pro	.347 <sup>b</sup>	4.824	.000	.457	.929	1.077
2	PL_TpoutN	-.012 <sup>c</sup>	-.151	.880	-.016	.799	1.251
	PL_TSpoutN	-.064 <sup>c</sup>	-.815	.417	-.087	.793	1.261
	S_pro	.173 <sup>c</sup>	1.540	.127	.163	.376	2.662

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.999
	PL_TSpoutN	1.000
	S_pro	.906
	R_pro	.929
2	PL_TpoutN	.743
	PL_TSpoutN	.737
	S_pro	.376

a. Dependent Variable: AvgPL\_d

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

c. Predictors in the Model: (Constant), SMSP\_d, R\_pro

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	R_pro
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	2.031	1.000	.01	.02	.01
	2	.946	1.466	.00	.91	.00
	3	.023	9.383	.99	.07	.99

a. Dependent Variable: AvgPL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00670818379 1488	.04015097767 1146	.01098901098 9011	.00450839037 2157
Std. Predicted Value	-.950	6.468	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00651220791 0419	.05017761886 1198	.01106029487 2457	.00515742123 4837
Residual	- .00357187655 7544	.02403136156 4994	.00000000000 0000	.00386389925 9371
Std. Residual	-.914	6.150	.000	.989

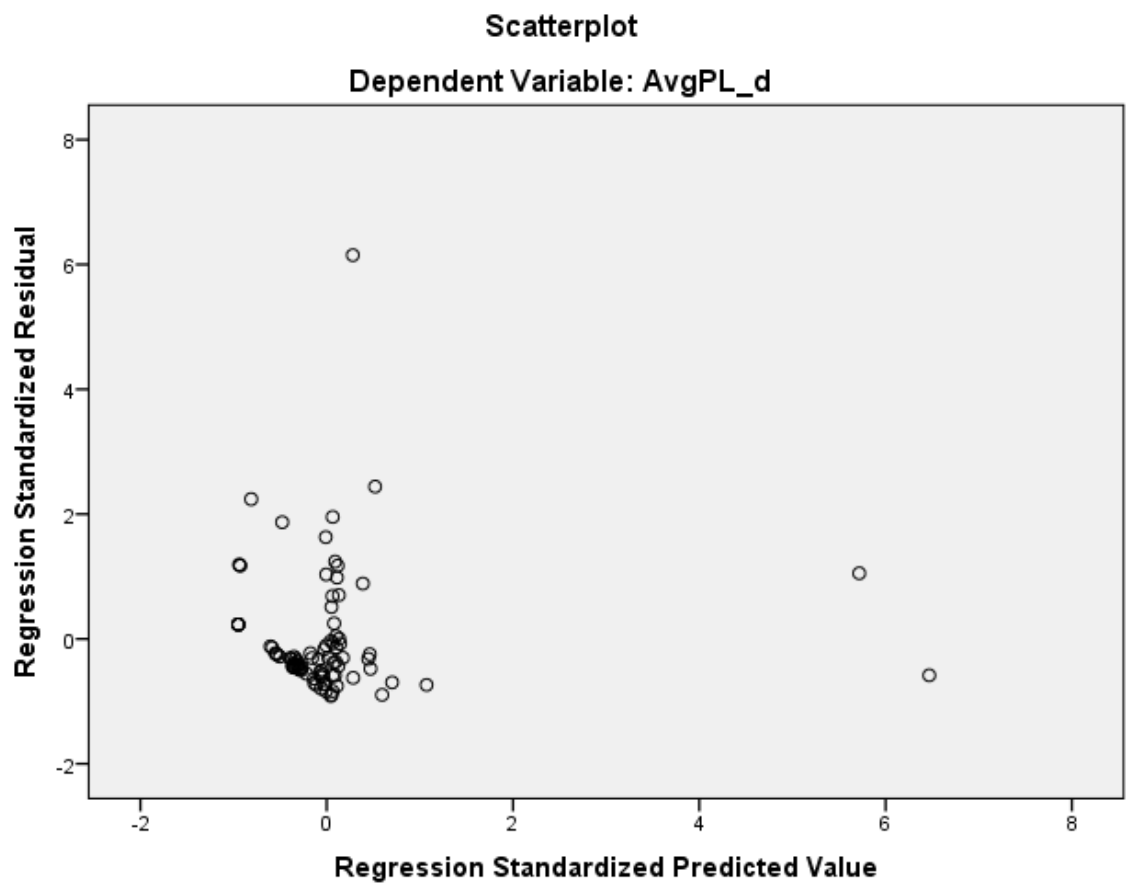
Stud. Residual	-1.355	6.215	-.004	1.012
Deleted Residual	-	-	-	-
	.01230442337	.02454121224	.00007128388	.00419192604
	6918	5822	3446	6923
Stud. Deleted Residual	-1.361	8.250	.022	1.167
Mahal. Distance	.021	72.350	1.978	8.359
Cook's Distance	.000	2.693	.042	.286
Centered Leverage Value	.000	.804	.022	.093

**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		06-JUN-2015 11:58:00
Comments		
Input	Active Dataset	DataSet5
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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_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
	Elapsed Time	00:00:00.19
	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
1	SMSP_d		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	.509 <sup>a</sup>	.259	.251	.00245195994 2763



2	.597 <sup>b</sup>	.356	.342	.00229828679 5074
---	-------------------	------	------	----------------------

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, 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	31.148	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	24.376	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.001	90			

a. Dependent Variable: AvgGL\_d

b. Predictors: (Constant), SMSP\_d

c. Predictors: (Constant), SMSP\_d, R\_pro

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		41.521	.000
	SMSP_d	.019	.003	.509	5.581	.000
2	(Constant)	.007	.001		6.051	.000
	SMSP_d	.016	.003	.423	4.765	.000
	R_pro	.367	.101	.324	3.647	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.929	1.077
	R_pro	.929	1.077

a. Dependent Variable: AvgGL\_d

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

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

					Correlation	Tolerance	VIF
1	PL_TpoutN	.163 <sup>b</sup>	1.804	.075	.189	.999	1.001
	PL_TSpoutN	.108 <sup>b</sup>	1.185	.239	.125	1.000	1.000
	S_pro	.327 <sup>b</sup>	3.633	.000	.361	.906	1.104
	R_pro	.324 <sup>b</sup>	3.647	.000	.362	.929	1.077
2	PL_TpoutN	.029 <sup>c</sup>	.301	.764	.032	.799	1.251
	PL_TSpoutN	-.043 <sup>c</sup>	-.445	.658	-.048	.793	1.261
	S_pro	.183 <sup>c</sup>	1.318	.191	.140	.376	2.662

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

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.999
	PL_TSpoutN	1.000
	S_pro	.906
	R_pro	.929
2	PL_TpoutN	.743
	PL_TSpoutN	.737
	S_pro	.376

a. Dependent Variable: AvgGL\_d

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

c. Predictors in the Model: (Constant), SMSP\_d, R\_pro

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

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	R_pro
1	1	1.142	1.000	.43	.43	
	2	.858	1.154	.57	.57	
2	1	2.031	1.000	.01	.02	.01
	2	.946	1.466	.00	.91	.00
	3	.023	9.383	.99	.07	.99

a. Dependent Variable: AvgGL\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00913680065 4233	.02101437561 2140	.01098901098 9011	.00169152522 2408
Std. Predicted Value	-1.095	5.927	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00893932767 2124	.02343071810 9012	.01099932708 2752	.00183038926 5648

Residual	- .00220099696 8895	.00886404421 1805	.00000000000 0000	.00227260680 7006
Std. Residual	-.958	3.857	.000	.989
Stud. Residual	-.964	3.898	.000	1.002
Deleted Residual	- .00296527147 2931	.00905210431 6652	- .00001031609 3741	.00235056206 8457
Stud. Deleted Residual	-.964	4.260	.013	1.042
Mahal. Distance	.021	72.350	1.978	8.359
Cook's Distance	.000	.452	.014	.052
Centered Leverage Value	.000	.804	.022	.093

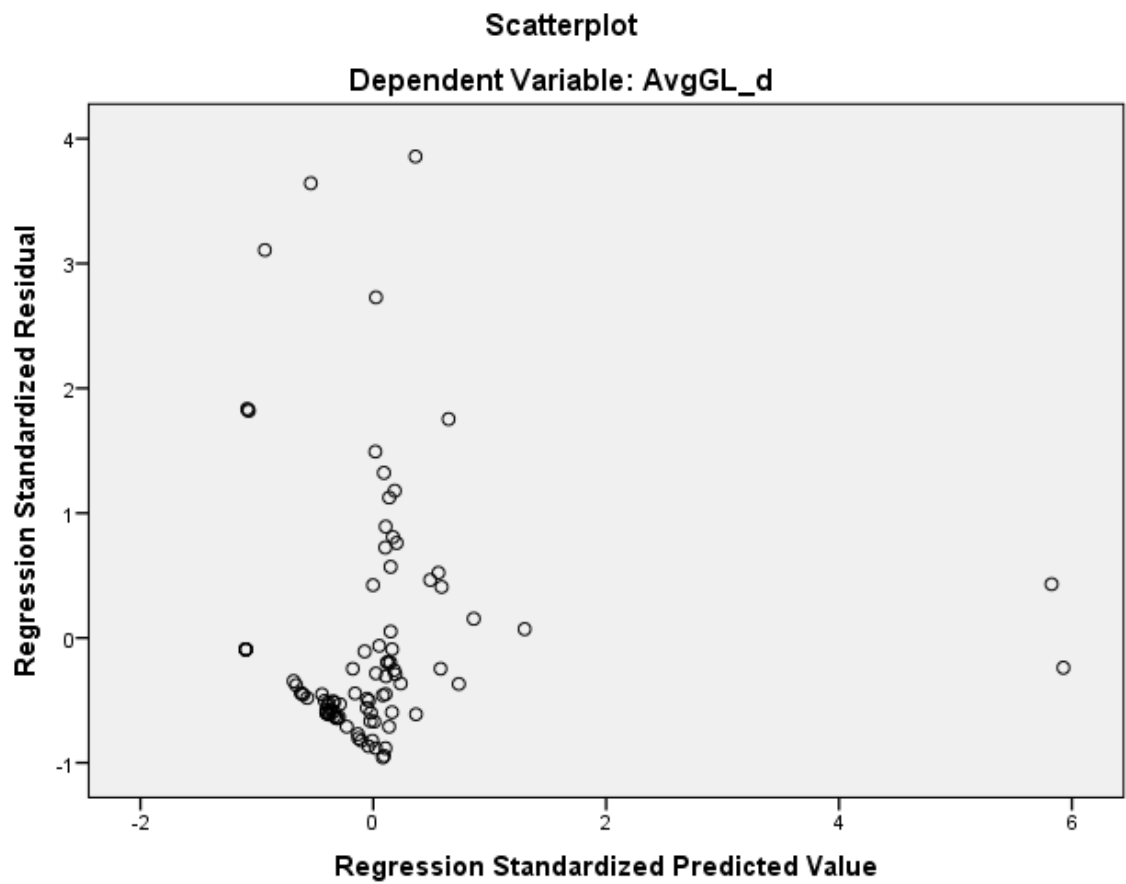
#### Residuals Statistics<sup>a</sup>

	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 GD\_d

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

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

/SAVE COOK.

## Regression

### Notes

Output Created	06-JUN-2015 11:59:06
Comments	
Input	Active Dataset
	DataSet5

	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 GD_d  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	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).

a. Dependent Variable: GD\_d

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.613 <sup>a</sup>	.376	.369	.00392015445 0739

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	.001	1	.001	53.045	.000 <sup>b</sup>
	Residual	.001	88	.000		
	Total	.002	89			

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)	-.002	.002		-1.295	.199
	R_pro	1.204	.165	.613	7.283	.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	.029 <sup>b</sup>	.315	.754	.034	.822	1.217
	PL_TSpoutN	-.046 <sup>b</sup>	-.490	.625	-.052	.811	1.233
	S_pro	.032 <sup>b</sup>	.232	.817	.025	.385	2.594
	SMSP_d	.042 <sup>b</sup>	.429	.669	.046	.734	1.363

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN	.822	
	PL_TSpoutN	.811	
	S_pro	.385	

SMSP_d	.734
--------	------

a. Dependent Variable: GD\_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	1.975	1.000	.01	.01
	2	.025	8.900	.99	.99

a. Dependent Variable: GD\_d

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

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00529935816 3029	.02546737343 0729	.01081215744 8929	.00302643040 1311
Std. Predicted Value	-1.822	4.842	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	.00518256146 4608	.02492289431 3931	.01080458042 3739	.00301255609 6084

Residual	- .00734678003 9370	.01799679733 8128	.00000000000 0000	.00389806889 7808
Std. Residual	-1.874	4.591	.000	.994
Stud. Residual	-1.886	4.636	.001	1.004
Deleted Residual	- .00743890879 6757	.01835067570 2095	.00000757702 5189	.00397529204 8510
Stud. Deleted Residual	-1.914	5.302	.009	1.046
Mahal. Distance	.000	23.449	.989	2.667
Cook's Distance	.000	.211	.010	.025
Centered Leverage Value	.000	.263	.011	.030

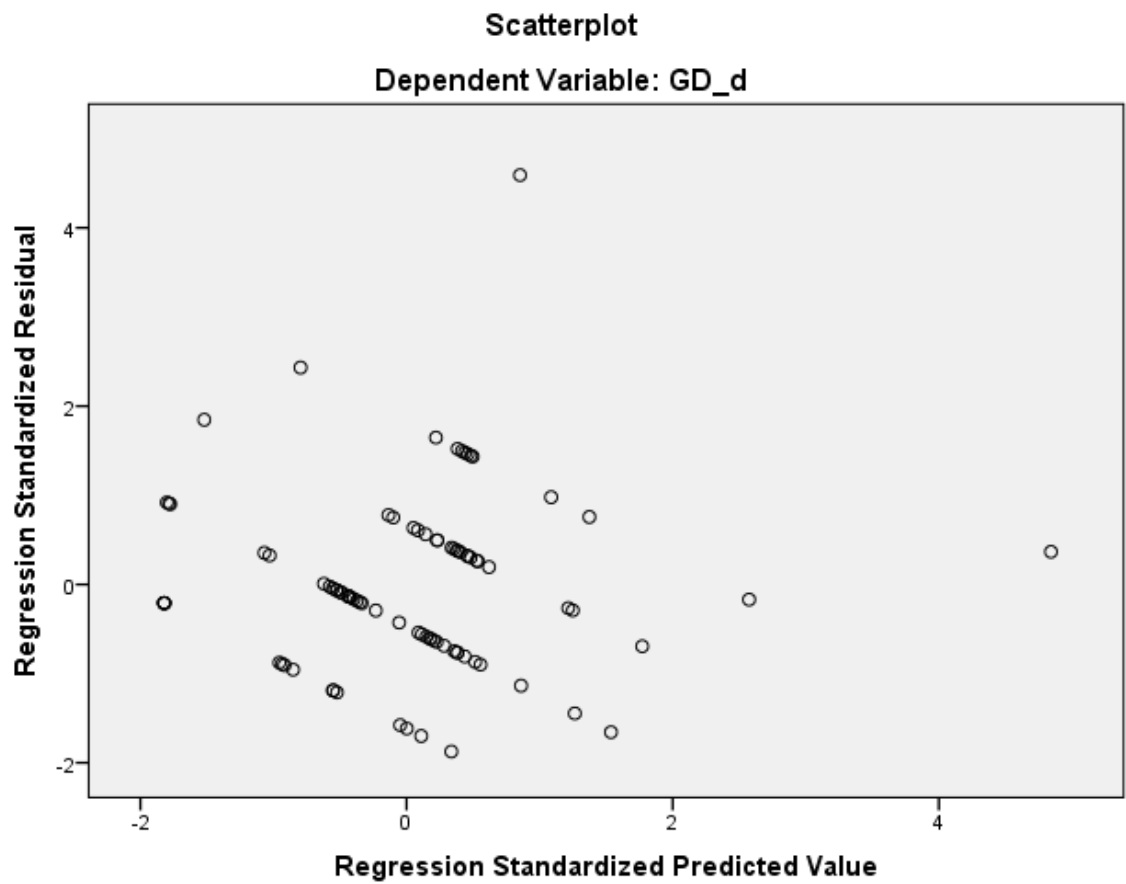
#### Residuals Statistics<sup>a</sup>

	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: 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

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	DataSet5

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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_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.23
	Elapsed Time	00:00:00.25
	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	SMSP_d		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	.463 <sup>a</sup>	.214	.205	.00166773468 0237

a. Predictors: (Constant), SMSP\_d

b. Dependent Variable: Tpaths\_d

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	23.994	.000 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			

a. Dependent Variable: Tpaths\_d

b. Predictors: (Constant), SMSP\_d

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.011	.000		61.183	.000
	SMSP_d	.023	.005	.463	4.898	.000

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	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	.108 <sup>b</sup>	1.147	.254	.122	.999	1.001
	PL_TSpoutN	.038 <sup>b</sup>	.402	.688	.043	1.000	1.000
	S_pro	.133 <sup>b</sup>	1.080	.283	.115	.586	1.708
	R_pro	.118 <sup>b</sup>	1.067	.289	.114	.734	1.363

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

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN	.999	
	PL_TSpoutN	1.000	
	S_pro	.586	

R_pro	.734
-------	------

a. Dependent Variable: Tpaths\_d

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

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	SMSP_d
1	1	1.105	1.000	.45	.45
	2	.895	1.112	.55	.55

a. Dependent Variable: Tpaths\_d

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01081592869 0135	.01903090067 2078	.01090720654 7116	.00086593400 3411
Std. Predicted Value	-.105	9.381	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.01075052283 7043	.01084149163 2164	.01081592908 8643	.00001895153 0457

Residual	- .00224951095 8791	.00575572624 8026	.00000000000 0000	.00165833891 7132
Std. Residual	-1.349	3.451	.000	.994
Stud. Residual	-1.356	3.471	.000	1.006
Deleted Residual	- .00227507343 5158	.00582113210 1119	.00000000000 0000	.00168668621 0694
Stud. Deleted Residual	-1.363	3.715	.008	1.031
Mahal. Distance	.011	88.011	.989	9.276
Cook's Distance	.000	.068	.006	.011
Centered Leverage Value	.000	.989	.011	.104

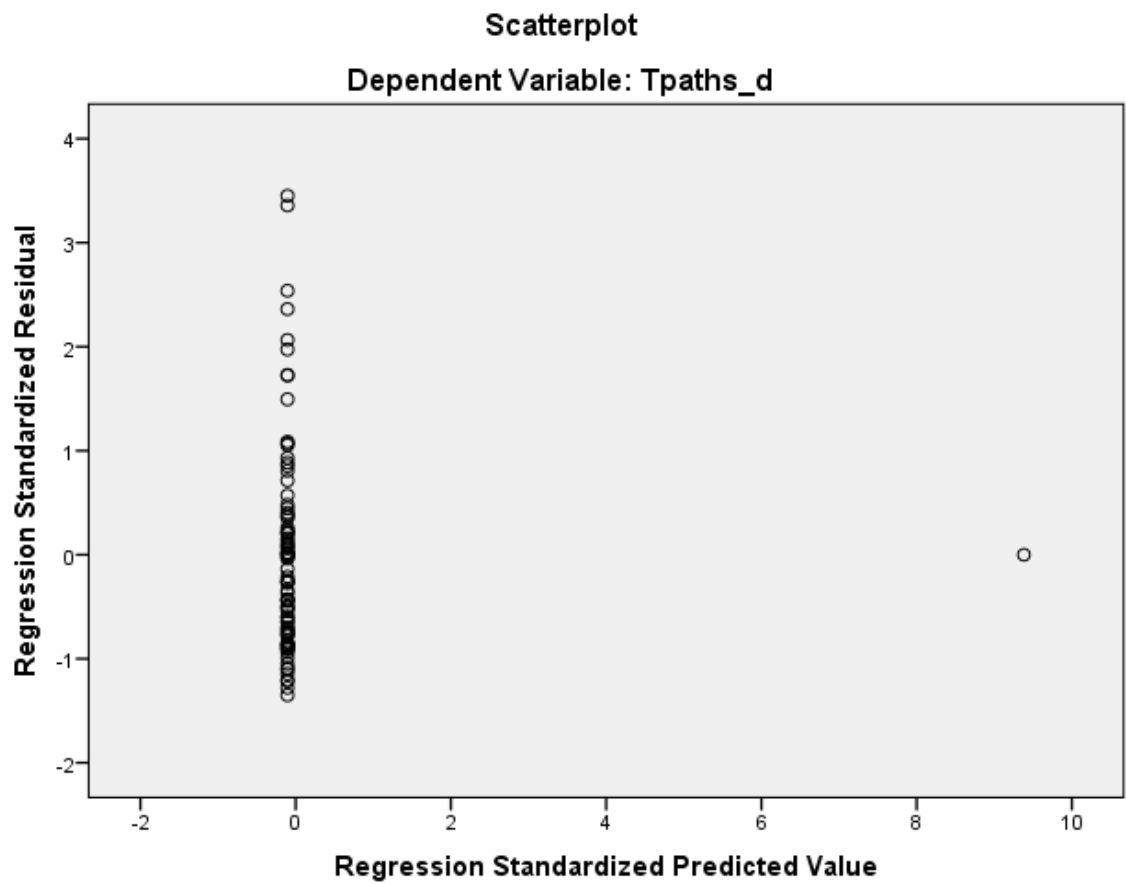
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89
Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90

Cook's Distance	89
Centered Leverage Value	90

a. Dependent Variable: Tpaths\_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	06-JUN-2015 11:59:42
Comments	
Input	Active Dataset
	DataSet5

	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.
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_d  /METHOD=STEPWISE PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.16
	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	SMSP_d		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: AvgPL\_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	.00415712660 1770
2	.679 <sup>b</sup>	.461	.449	.00388875146 0801

a. Predictors: (Constant), SMSP\_d

b. Predictors: (Constant), SMSP\_d, R\_pro

c. Dependent Variable: AvgPL\_d

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	53.316	.000 <sup>b</sup>
	Residual	.002	88	.000		
	Total	.002	89			
2	Regression	.001	2	.001	37.247	.000 <sup>c</sup>
	Residual	.001	87	.000		
	Total	.002	89			

a. Dependent Variable: AvgPL\_d

b. Predictors: (Constant), SMSP\_d

c. Predictors: (Constant), SMSP\_d, R\_pro

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.010	.000		23.490	.000
	SMSP_d	.086	.012	.614	7.302	.000
2	(Constant)	.003	.002		1.276	.205
	SMSP_d	.061	.013	.440	4.784	.000
	R_pro	.705	.191	.338	3.683	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_d	1.000	1.000
2	(Constant)		
	SMSP_d	.734	1.363
	R_pro	.734	1.363

a. Dependent Variable: AvgPL\_d

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	.163 <sup>b</sup>	1.969	.052	.207	.999	1.001
	PL_TSpoutN	.115 <sup>b</sup>	1.376	.172	.146	1.000	1.000
	S_pro	.340 <sup>b</sup>	3.254	.002	.329	.586	1.708
	R_pro	.338 <sup>b</sup>	3.683	.000	.367	.734	1.363
2	PL_TpoutN	.021 <sup>c</sup>	.226	.822	.024	.740	1.351
	PL_TSpoutN	-.044 <sup>c</sup>	-.482	.631	-.052	.740	1.352
	S_pro	.150 <sup>c</sup>	1.056	.294	.113	.308	3.252

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpoutN		
	PL_TSpoutN		
	S_pro		
	R_pro		
2	PL_TpoutN		

PL_TSpoutN	.543
S_pro	.308

- a. Dependent Variable: AvgPL\_d
- b. Predictors in the Model: (Constant), SMSP\_d
- c. Predictors in the Model: (Constant), SMSP\_d, R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	SMSP_d	R_pro
1	1	1.105	1.000	.45	.45	
	2	.895	1.112	.55	.55	
2	1	2.026	1.000	.01	.02	.01
	2	.956	1.456	.00	.72	.00
	3	.018	10.478	.99	.27	.99

- a. Dependent Variable: AvgPL\_d

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	.00721869012 3409	.04087571799 7551	.01069029783 5930	.00355777257 2073
Std. Predicted Value	-.976	8.484	.000	1.000
Standard Error of Predicted Value	.000	.004	.001	.000
Adjusted Predicted Value	.00700030662 1194	.01528368610 8887	.01033927389 5007	.00155603002 2560
Residual	- .00343373487 7035	.02432464621 9611	.00000000000 0000	.00384480935 5712
Std. Residual	-.883	6.255	.000	.989
Stud. Residual	-.889	6.331	.002	1.007
Deleted Residual	- .00348100229 1664	.02491881884 6345	.00001186190 9906	.00396703904 8594
Stud. Deleted Residual	-.888	8.572	.030	1.185
Mahal. Distance	.011	88.011	1.978	9.307
Cook's Distance	.000	.326	.009	.037
Centered Leverage Value	.000	.989	.022	.105

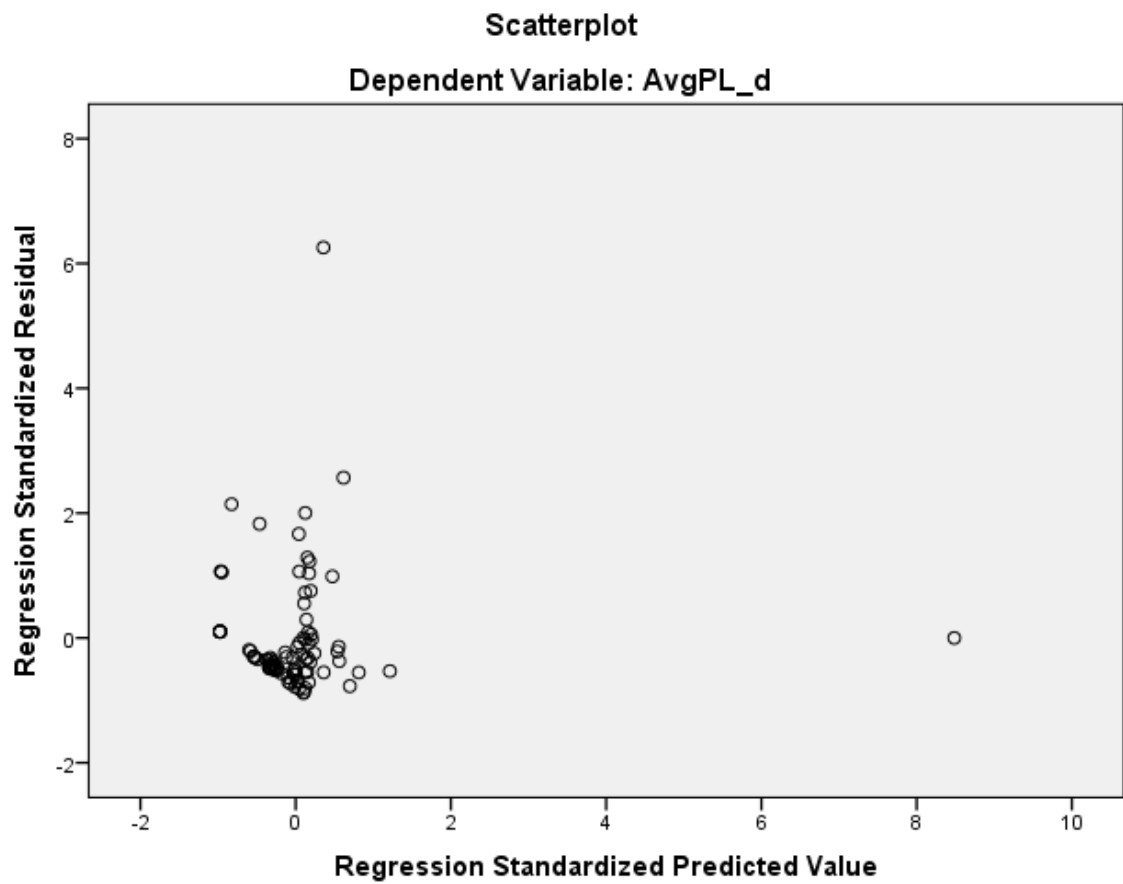
#### Residuals Statistics<sup>a</sup>

	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90
Adjusted Predicted Value	89

Residual	90
Std. Residual	90
Stud. Residual	89
Deleted Residual	89
Stud. Deleted Residual	89
Mahal. Distance	90
Cook's Distance	89
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 Ecout

/METHOD=STEPWISE PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.



## Regression

### Notes

Output Created		06-JUN-2015 12:09:15
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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 ECout  /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	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	PL_TpoutN		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	.384 <sup>a</sup>	.148	.138	.00393569932 8751

a. Predictors: (Constant), PL\_TpoutN

b. Dependent Variable: Ecout

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	15.428	.000 <sup>b</sup>
	Residual	.001	89	.000		

Total	.002	90			
-------	------	----	--	--	--

a. Dependent Variable: ECont

b. Predictors: (Constant), PL\_TpoutN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.013	.001		19.984	.000
	PL_TpoutN	-.179	.045	-.384	-3.928	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpoutN	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	PL_TSpoutN	.063 <sup>b</sup>	.467	.642	.050	.530	1.887
	S_pro	.004 <sup>b</sup>	.039	.969	.004	.972	1.029
	R_pro	-.032 <sup>b</sup>	-.298	.766	-.032	.822	1.216
	SMSP_d	-.186 <sup>b</sup>	-1.928	.057	-.201	.999	1.001

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TSpoutN	.530	
	S_pro	.972	
	R_pro	.822	
	SMSP_d	.999	

a. Dependent Variable: Ecout

b. Predictors in the Model: (Constant), PL\_TpoutN

**Collinearity Diagnostics<sup>a</sup>**

Model Dimension		Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	PL_TpoutN

1	1	1.771	1.000	.11	.11
	2	.229	2.782	.89	.89

a. Dependent Variable: ECont

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00840383488 6849	.01295229047 5369	.01098901098 9011	.00162948129 9011
Std. Predicted Value	-1.587	1.205	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00811944808 8109	.01307611912 4889	.01097778908 6203	.00163336225 7018
Residual	- .01143670734 0181	.00701588112 8609	.00000000000 0000	.00391377325 6595
Std. Residual	-2.906	1.783	.000	.994
Stud. Residual	-2.923	1.818	.001	1.004
Deleted Residual	- .01157379709 1842	.00730026746 1687	.00001122190 2808	.00399237368 0109
Stud. Deleted Residual	-3.057	1.843	-.002	1.017
Mahal. Distance	.001	2.517	.989	.636
Cook's Distance	.000	.067	.010	.014

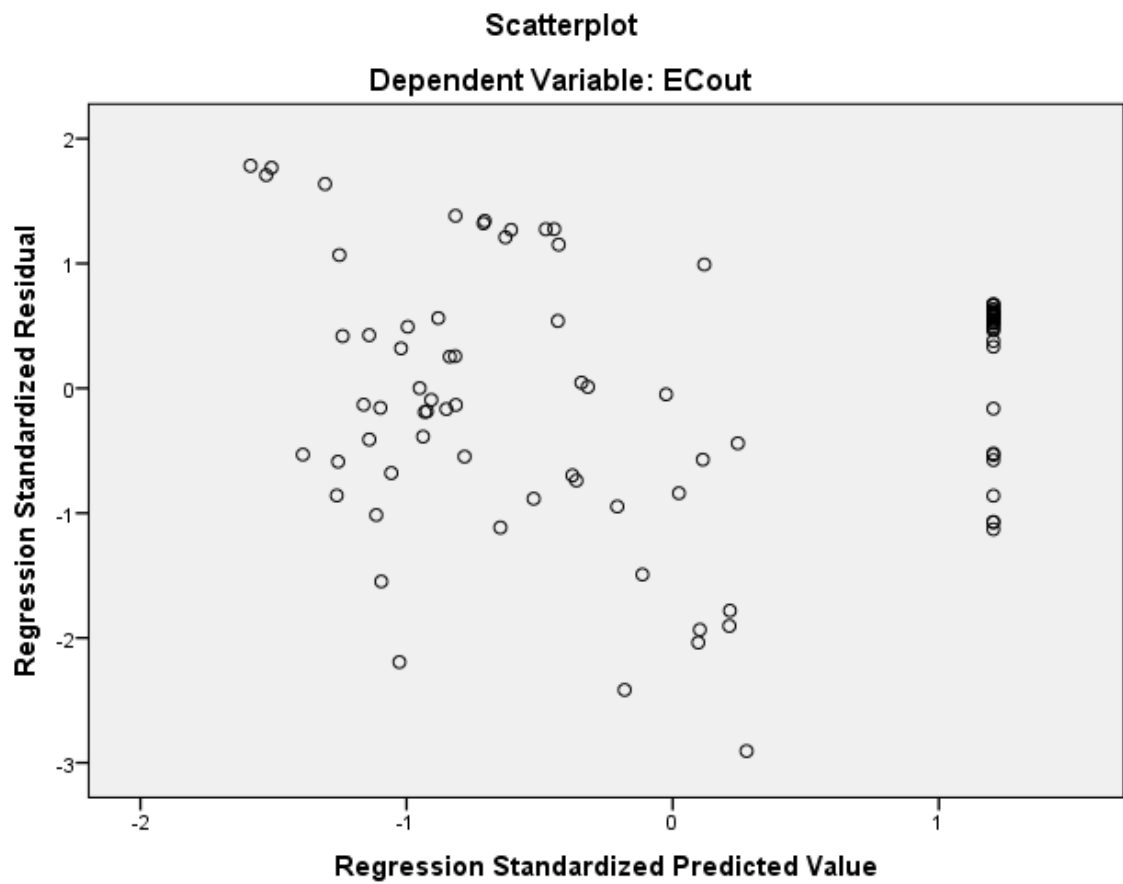
Centered Leverage Value	.000	.028	.011	.007
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# Residuals Statistics<sup>a</sup>

	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 PL\_TpoutN PL\_TSpoutN S\_pro R\_pro SMSP\_d

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/SAVE COOK.



## Regression

### Notes

Output Created		06-JUN-2015 12:09:37
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		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	00:00:00.20
	Elapsed Time	00:00:00.18
	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	PL_TpoutN		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: PL\_EVCoutN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.489 <sup>a</sup>	.240	.231	.010034542329090
2	.555 <sup>b</sup>	.308	.292	.009627382984795

a. Predictors: (Constant), PL\_TpoutN

b. Predictors: (Constant), PL\_TpoutN, R\_pro

c. Dependent Variable: PL\_EVCoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.003	1	.003	28.044	.000 <sup>b</sup>
	Residual	.009	89	.000		
	Total	.012	90			
2	Regression	.004	2	.002	19.577	.000 <sup>c</sup>
	Residual	.008	88	.000		
	Total	.012	90			

a. Dependent Variable: PL\_EVCoutN

b. Predictors: (Constant), PL\_TpoutN

c. Predictors: (Constant), PL\_TpoutN, R\_pro

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.004	.002		2.566	.012

	PL_TpoutN	.614	.116	.489	5.296	.000
2	(Constant)	-.009	.005		-1.853	.067
	PL_TpoutN	.462	.123	.368	3.761	.000
	R_pro	1.319	.448	.288	2.947	.004

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpoutN	1.000	1.000
2	(Constant)		
	PL_TpoutN	.822	1.216
	R_pro	.822	1.216

a. Dependent Variable: PL\_EVCoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpoutN	-.149 <sup>b</sup>	-1.173	.244	-.124	.530	1.887
	S_pro	.210 <sup>b</sup>	2.293	.024	.237	.972	1.029
	R_pro	.288 <sup>b</sup>	2.947	.004	.300	.822	1.216

	SMSP_d	.080 <sup>b</sup>	.862	.391	.092	.999	1.001
2	PL_TSpoutN	-.239 <sup>c</sup>	-1.944	.055	-.204	.504	1.982
	S_pro	-.004 <sup>c</sup>	-.026	.979	-.003	.354	2.827
	SMSP_d	-.001 <sup>c</sup>	-.013	.990	-.001	.903	1.107

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TSpoutN	.530	
	S_pro	.972	
	R_pro	.822	
	SMSP_d	.999	
2	PL_TSpoutN	.504	
	S_pro	.299	
	SMSP_d	.743	

a. Dependent Variable: PL\_EVCoutN

b. Predictors in the Model: (Constant), PL\_TpoutN

c. Predictors in the Model: (Constant), PL\_TpoutN, R\_pro

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	PL_TpoutN	R_pro
1	1	1.771	1.000	.11	.11	
	2	.229	2.782	.89	.89	
2	1	2.709	1.000	.01	.04	.01
	2	.269	3.172	.04	.86	.01
	3	.022	11.033	.96	.11	.98

a. Dependent Variable: PL\_EVCoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00013116755 8720	.02601381577 5514	.01098901098 9011	.00634993873 4278
Std. Predicted Value	-1.751	2.366	.000	1.000
Standard Error of Predicted Value	.001	.006	.002	.001
Adjusted Predicted Value	- .00013819492 5967	.02784499526 0239	.01100963293 7482	.00640521192 0862
Residual	- .01886416040 3609	.03191622346 6396	.00000000000 0000	.00951981108 3537
Std. Residual	-1.959	3.315	.000	.989
Stud. Residual	-2.007	3.358	-.001	1.004

Deleted Residual	- .01979754306 3760	.03273794427 5141	- .00002062194 8471	.00982348842 9460
Stud. Deleted Residual	-2.043	3.575	.002	1.021
Mahal. Distance	.080	30.110	1.978	3.236
Cook's Distance	.000	.125	.011	.020
Centered Leverage Value	.001	.335	.022	.036

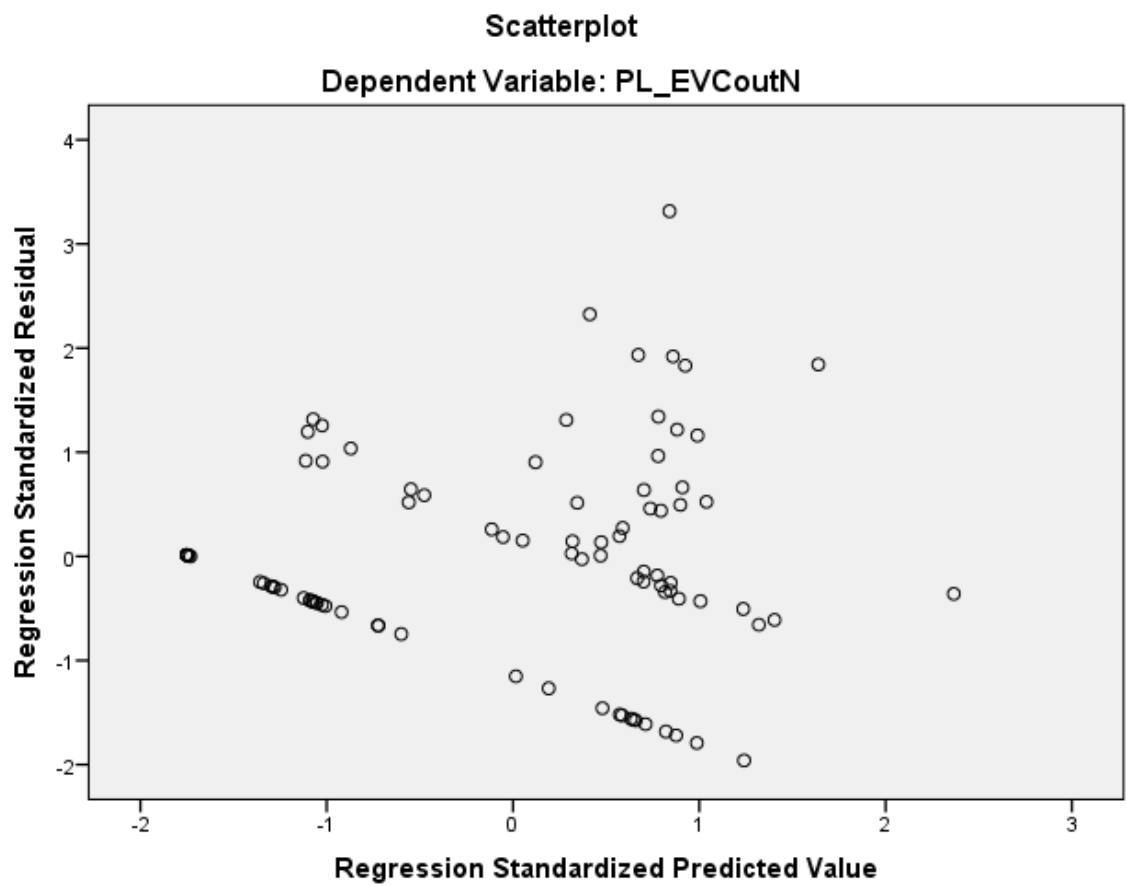
**Residuals Statistics<sup>a</sup>**

	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: PL\_EVCoutN



## Charts



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.

```

## Regression

### Notes

Output Created	06-JUN-2015 12:09:55	
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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 EVCout_TpoutN  /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	00:00:00.23
	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	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: EVCout\_TpoutN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.218 <sup>a</sup>	.048	.037	.01325602605 5723
2	.421 <sup>b</sup>	.177	.158	.01239279567 9732

a. Predictors: (Constant), S\_pro

b. Predictors: (Constant), S\_pro, R\_pro

c. Dependent Variable: EVCout\_TpoutN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	4.448	.038 <sup>b</sup>
	Residual	.016	89	.000		
	Total	.016	90			
2	Regression	.003	2	.001	9.460	.000 <sup>c</sup>
	Residual	.014	88	.000		
	Total	.016	90			

a. Dependent Variable: EVCout\_TpoutN

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)	.009	.002		5.766	.000
	S_pro	.156	.074	.218	2.109	.038
2	(Constant)	.040	.008		4.761	.000
	S_pro	.480	.111	.672	4.316	.000
	R_pro	-3.128	.841	-.579	-3.719	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	S_pro	1.000	1.000
2	(Constant)		
	S_pro	.386	2.591
	R_pro	.386	2.591

a. Dependent Variable: EVCout\_TpoutN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpoutN	-.114 <sup>b</sup>	-1.088	.279	-.115	.972	1.029

	PL_TSpoutN	-.175 <sup>b</sup>	-1.682	.096	-.177	.970	1.031
	R_pro	-.579 <sup>b</sup>	-3.719	.000	-.369	.386	2.591
	SMSP_d	.090 <sup>b</sup>	.827	.410	.088	.906	1.104
2	PL_TpoutN	.076 <sup>c</sup>	.678	.499	.073	.754	1.327
	PL_TSpoutN	.003 <sup>c</sup>	.031	.976	.003	.740	1.351
	SMSP_d	.107 <sup>c</sup>	1.055	.294	.112	.904	1.106

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.972
	PL_TSpoutN	.970
	R_pro	.386
	SMSP_d	.906
2	PL_TpoutN	.299
	PL_TSpoutN	.295
	SMSP_d	.376

a. Dependent Variable: EVCout\_TpoutN

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 Index	Variance Proportions		
				(Constant)	S_pro	R_pro
1	1	1.504	1.000	.25	.25	
	2	.496	1.742	.75	.75	
2	1	2.434	1.000	.00	.03	.00
	2	.556	2.093	.01	.38	.00
	3	.010	15.324	.99	.59	1.00

a. Dependent Variable: EVCout\_TpoutN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00207969709 2995	.02805074304 3423	.01098901098 9011	.00568198134 9705
Std. Predicted Value	-1.568	3.003	.000	1.000
Standard Error of Predicted Value	.001	.008	.002	.001
Adjusted Predicted Value	.00108165992 4239	.02398784644 9018	.01088165540 0170	.00555065272 4968
Residual	- .01892610825 5982	.03363881260 1566	.00000000000 0000	.01225432434 2788
Std. Residual	-1.527	2.714	.000	.989



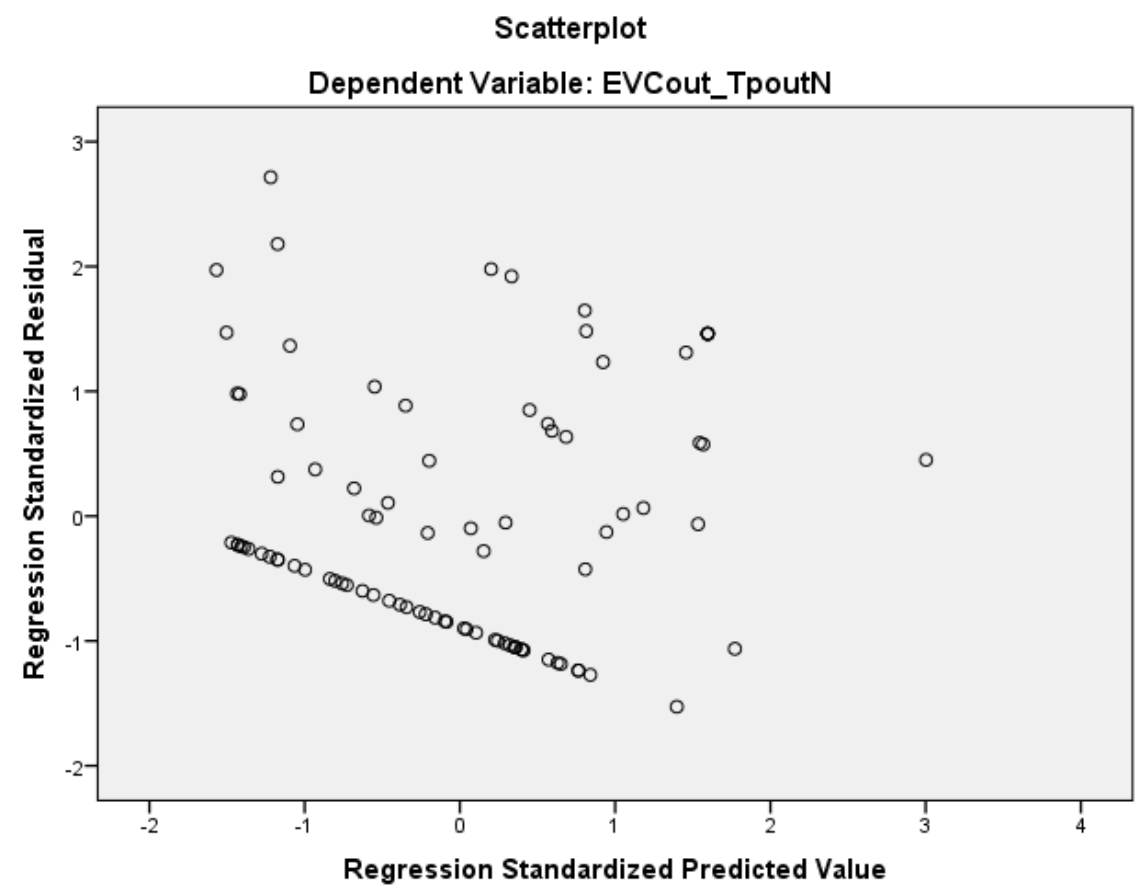
Stud. Residual	-1.589	2.753	.004	1.007
Deleted Residual	-	.03459227830	.00010735558	.01271150488
	.02047642134	1716	8841	8549
	1300			
Stud. Deleted Residual	-1.603	2.863	.008	1.016
Mahal. Distance	.014	36.924	1.978	4.125
Cook's Distance	.000	.085	.013	.020
Centered Leverage Value	.000	.410	.022	.046

#### 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 PL_TpoutN PL_TSpoutN S_pro R_pro SMSP_d

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/SAVE COOK.

```

## Regression

### Notes

Output Created		06-JUN-2015 12:10:13
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 EVCut_TSpoutN  /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	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	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: EVCout\_TSpoutN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.239 <sup>a</sup>	.057	.046	.01359816054 0698

2	.449 <sup>b</sup>	.201	.183	.01258709116 8457
---	-------------------	------	------	----------------------

a. Predictors: (Constant), S\_pro

b. Predictors: (Constant), S\_pro, R\_pro

c. Dependent Variable: EVCout\_TSpoutN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	5.388	.023 <sup>b</sup>
	Residual	.016	89	.000		
	Total	.017	90			
2	Regression	.004	2	.002	11.080	.000 <sup>c</sup>
	Residual	.014	88	.000		
	Total	.017	90			

a. Dependent Variable: EVCout\_TSpoutN

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)	.009	.002		5.487	.000
	S_pro	.176	.076	.239	2.321	.023
2	(Constant)	.043	.009		4.979	.000
	S_pro	.528	.113	.718	4.680	.000
	R_pro	-3.403	.854	-.611	-3.984	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	S_pro	1.000	1.000
2	(Constant)		
	S_pro	.386	2.591
	R_pro	.386	2.591

a. Dependent Variable: EVCout\_TSpoutN

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
-------	---------	---	------	---------	-------------------------

					Correlation	Tolerance	VIF
1	PL_TpoutN	-.128 <sup>b</sup>	-1.230	.222	-.130	.972	1.029
	PL_TSpoutN	-.180 <sup>b</sup>	-1.746	.084	-.183	.970	1.031
	R_pro	-.611 <sup>b</sup>	-3.984	.000	-.391	.386	2.591
	SMSP_d	.061 <sup>b</sup>	.560	.577	.060	.906	1.104
2	PL_TpoutN	.070 <sup>c</sup>	.636	.526	.068	.754	1.327
	PL_TSpoutN	.009 <sup>c</sup>	.082	.935	.009	.740	1.351
	SMSP_d	.079 <sup>c</sup>	.786	.434	.084	.904	1.106

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpoutN	.972
	PL_TSpoutN	.970
	R_pro	.386
	SMSP_d	.906
2	PL_TpoutN	.299
	PL_TSpoutN	.295
	SMSP_d	.376

a. Dependent Variable: EVCout\_TSpoutN

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 Index	Variance Proportions		
				(Constant)	S_pro	R_pro
1	1	1.504	1.000	.25	.25	
	2	.496	1.742	.75	.75	
2	1	2.434	1.000	.00	.03	.00
	2	.556	2.093	.01	.38	.00
	3	.010	15.324	.99	.59	1.00

a. Dependent Variable: EVCout\_TSpoutN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00122679281 0485	.03028650023 0432	.01098901098 9011	.00624582999 0905
Std. Predicted Value	-1.563	3.090	.000	1.000
Standard Error of Predicted Value	.001	.008	.002	.001
Adjusted Predicted Value	.00014167375 0477	.02508761361 2413	.01086312857 4997	.00607653729 3469

Residual	- .01991567760 7059	.03650414198 6370	.00000000000 0000	.01244644886 4060
Std. Residual	-1.582	2.900	.000	.989
Stud. Residual	-1.646	2.941	.005	1.008
Deleted Residual	- .02154705114 6626	.03753882274 0316	.00012588241 4014	.01293595550 8948
Stud. Deleted Residual	-1.662	3.079	.009	1.017
Mahal. Distance	.014	36.924	1.978	4.125
Cook's Distance	.000	.135	.014	.024
Centered Leverage Value	.000	.410	.022	.046

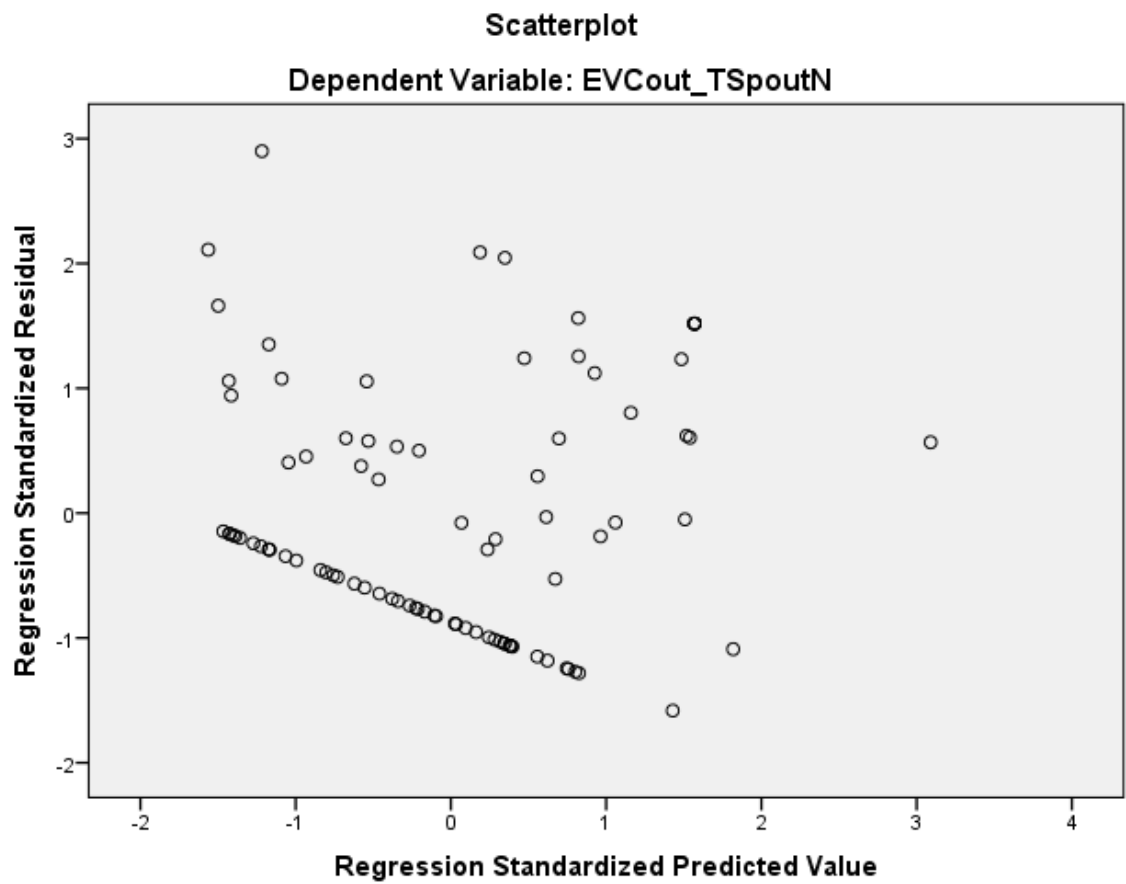
#### Residuals Statistics<sup>a</sup>

	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=(\*ZPRED ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

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Comments	
Input	Active Dataset DataSet2

	Filter	<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 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=(*ZPRED ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.28
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	Memory Required	15744 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	CC_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	S_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	.387 <sup>a</sup>	.150	.140	.003460239475895
2	.446 <sup>b</sup>	.199	.181	.003377341304407

a. Predictors: (Constant), CC\_ud

b. Predictors: (Constant), CC\_ud, S\_ud

c. Dependent Variable: ECud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	15.684	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	10.943	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			

a. Dependent Variable: ECud

b. Predictors: (Constant), CC\_ud

c. Predictors: (Constant), CC\_ud, S\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		26.500	.000
	CC_ud	-.100	.025	-.387	-3.960	.000
2	(Constant)	.010	.001		10.255	.000
	CC_ud	-.146	.032	-.569	-4.615	.000
	S_ud	.232	.100	.287	2.329	.022

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	CC_ud	1.000	1.000
2	(Constant)		
	CC_ud	.599	1.670
	S_ud	.599	1.670



a. Dependent Variable: ECud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Nodes	.006 <sup>b</sup>	.058	.954	.006	.992	1.009
	Edges_ud	.000 <sup>b</sup>	.004	.997	.000	.996	1.004
	Den_ud	.129 <sup>b</sup>	1.302	.196	.137	.968	1.033
	GD_ud	-.099 <sup>b</sup>	-.963	.338	-.102	.910	1.098
	Tpaths_ud	-.161 <sup>b</sup>	-1.605	.112	-.169	.928	1.078
	TSpaths_ud	-.143 <sup>b</sup>	-1.472	.145	-.155	1.000	1.000
	AvgPL_ud	-.102 <sup>b</sup>	-.996	.322	-.106	.910	1.098
	AvgGL_ud	-.037 <sup>b</sup>	-.370	.712	-.039	.971	1.030
	PL_TpudN	-.025 <sup>b</sup>	-.237	.813	-.025	.871	1.148
	PL_TSpudN	-.101 <sup>b</sup>	-1.030	.306	-.109	.988	1.013
	S_ud	.287 <sup>b</sup>	2.329	.022	.241	.599	1.670
	R_ud	-.004 <sup>b</sup>	-.039	.969	-.004	.753	1.327
	SMSP_ud	-.050 <sup>b</sup>	-.127	.899	-.014	.062	16.186
2	Nodes	.100 <sup>c</sup>	.971	.334	.104	.861	1.162
	Edges_ud	.096 <sup>c</sup>	.933	.353	.100	.859	1.164
	Den_ud	-.049 <sup>c</sup>	-.369	.713	-.040	.512	1.952

GD_ud	-.135 <sup>c</sup>	-1.344	.182	-.143	.891	1.122
Tpaths_ud	-.136 <sup>c</sup>	-1.374	.173	-.146	.915	1.093
TSpaths_ud	-.011 <sup>c</sup>	-.091	.928	-.010	.625	1.600
AvgPL_ud	-.138 <sup>c</sup>	-1.370	.174	-.145	.892	1.121
AvgGL_ud	-.085 <sup>c</sup>	-.858	.393	-.092	.933	1.072
PL_TpudN	-.039 <sup>c</sup>	-.381	.704	-.041	.868	1.152
PL_TSpudN	-.121 <sup>c</sup>	-1.257	.212	-.134	.981	1.020
R_ud	-.197 <sup>c</sup>	-1.530	.130	-.162	.539	1.857
SMSP_ud	.106 <sup>c</sup>	.272	.786	.029	.060	16.679

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.992
	Edges_ud	.996
	Den_ud	.968
	GD_ud	.910
	Tpaths_ud	.928
	TSpaths_ud	1.000
	AvgPL_ud	.910
	AvgGL_ud	.971
	PL_TpudN	.871

	PL_TSpudN	.988
	S_ud	.599
	R_ud	.753
	SMSP_ud	.062
2	Nodes	.520
	Edges_ud	.517
	Den_ud	.317
	GD_ud	.585
	Tpaths_ud	.552
	TSpaths_ud	.374
	AvgPL_ud	.585
	AvgGL_ud	.575
	PL_TpudN	.561
	PL_TSpudN	.595
	R_ud	.428
	SMSP_ud	.054

a. Dependent Variable: ECud

b. Predictors in the Model: (Constant), CC\_ud

c. Predictors in the Model: (Constant), CC\_ud, S\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	CC_ud	S_ud
1	1	1.606	1.000	.20	.20	
	2	.394	2.019	.80	.80	
2	1	2.529	1.000	.02	.04	.01
	2	.418	2.460	.09	.60	.01
	3	.053	6.881	.89	.35	.98

a. Dependent Variable: ECud

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00574594456 7025	.01348588801 9204	.01098901098 9011	.00166548651 6195
Std. Predicted Value	-3.148	1.499	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00569256208 8370	.01345180254 4296	.01097465321 3689	.00168131490 9459
Residual	- .00876884534 9550	.00744113326 0727	.00000000000 0000	.00333960446 2953
Std. Residual	-2.596	2.203	.000	.989

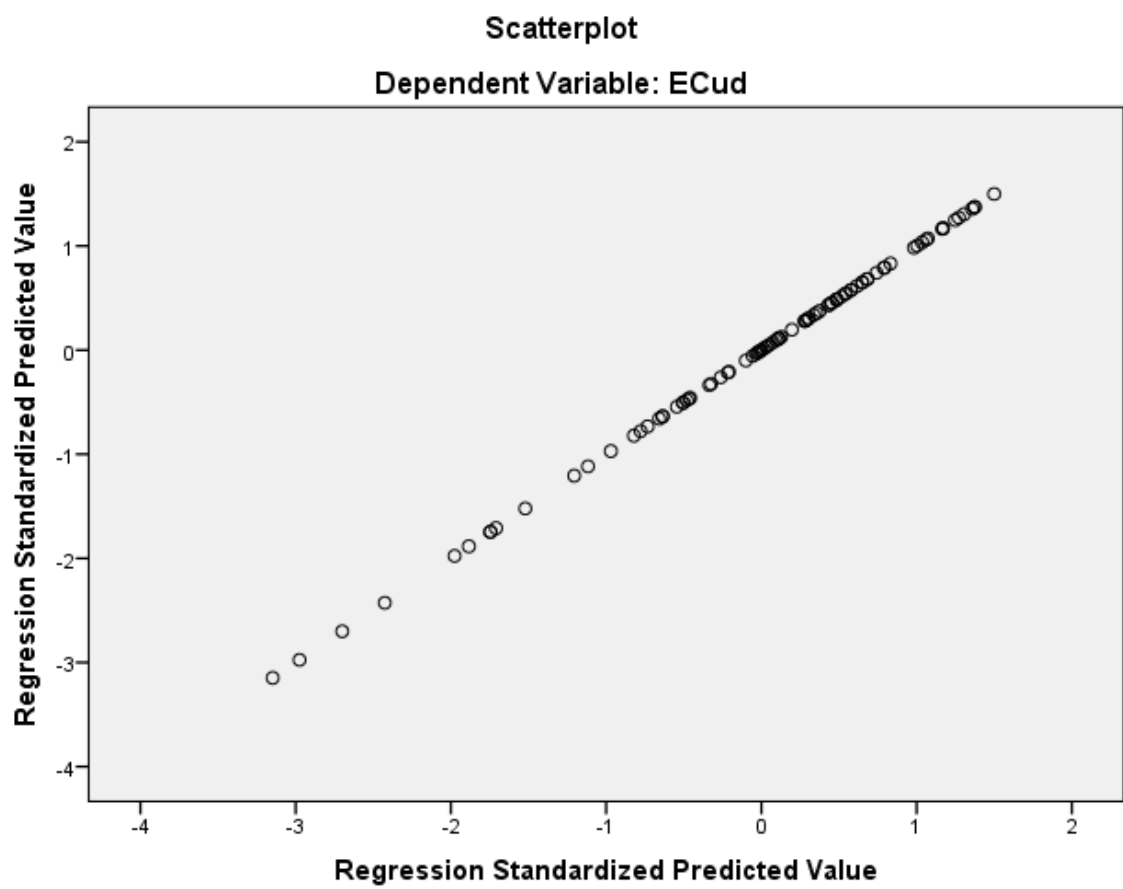
Stud. Residual	-2.645	2.319	.002	1.007
Deleted Residual	-	.00824026111	.00001435777	.00346658787
	.00909831654	5134	5322	7329
	2804			
Stud. Deleted Residual	-2.741	2.379	-.002	1.020
Mahal. Distance	.018	14.598	1.978	2.525
Cook's Distance	.000	.192	.013	.026
Centered Leverage Value	.000	.162	.022	.028

**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=(\*ZPRED ,\*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.
	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 TSpaths_ud AvgPL_ud AvgGL_ud PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZPRED ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.19
	Memory Required	15792 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_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	.207 <sup>a</sup>	.043	.032	.00289458411 3436

a. Predictors: (Constant), R\_ud

b. Dependent Variable: PL\_EVCudN

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	3.992	.049 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: PL\_EVCudN

b. Predictors: (Constant), R\_ud

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.003		2.002	.048
	R_ud	.498	.249	.207	1.998	.049

Coefficients<sup>a</sup>

Model	Collinearity Statistics	
	Tolerance	VIF

1	(Constant)		
	R_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	-.011 <sup>b</sup>	-.104	.918	-.011	.900	1.111
	Edges_ud	-.005 <sup>b</sup>	-.048	.962	-.005	.914	1.094
	Den_ud	.060 <sup>b</sup>	.556	.579	.059	.946	1.057
	CC_ud	.033 <sup>b</sup>	.273	.786	.029	.753	1.327
	GD_ud	-.025 <sup>b</sup>	-.176	.861	-.019	.520	1.922
	Tpaths_ud	.010 <sup>b</sup>	.079	.937	.008	.668	1.496
	TSpaths_ud	-.010 <sup>b</sup>	-.091	.927	-.010	.972	1.029
	AvgPL_ud	-.024 <sup>b</sup>	-.169	.866	-.018	.520	1.924
	AvgGL_ud	-.059 <sup>b</sup>	-.465	.643	-.049	.682	1.467
	PL_TpudN	-.069 <sup>b</sup>	-.598	.551	-.064	.818	1.223
	PL_TSpudN	-.049 <sup>b</sup>	-.431	.667	-.046	.837	1.195
	S_ud	-.067 <sup>b</sup>	-.475	.636	-.051	.547	1.829
	SMSP_ud	.058 <sup>b</sup>	.470	.640	.050	.722	1.386

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	Nodes	.900
	Edges_ud	.914
	Den_ud	.946
	CC_ud	.753
	GD_ud	.520
	Tpaths_ud	.668
	TSpaths_ud	.972
	AvgPL_ud	.520
	AvgGL_ud	.682
	PL_TpudN	.818
	PL_TSpudN	.837
	S_ud	.547
	SMSP_ud	.722

a. Dependent Variable: PL\_EVCudN

b. Predictors in the Model: (Constant), R\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_ud
1	1	1.994	1.000	.00	.00
	2	.006	18.106	1.00	1.00

a. Dependent Variable: PL\_EVCudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00945139955 7292	.01203136332 3331	.01098901098 9011	.00060961065 3308
Std. Predicted Value	-2.522	1.710	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00932739023 1192	.01217716000 9742	.01098622510 8310	.00062167826 9436
Residual	- .01114702783 5250	.00759522477 1649	.00000000000 0000	.00287845817 1174
Std. Residual	-3.851	2.624	.000	.994
Stud. Residual	-3.874	2.654	.000	1.003
Deleted Residual	- .01127939764 4103	.00777160190 0458	.00000278588 0701	.00292983330 1144
Stud. Deleted Residual	-4.225	2.750	-.002	1.025

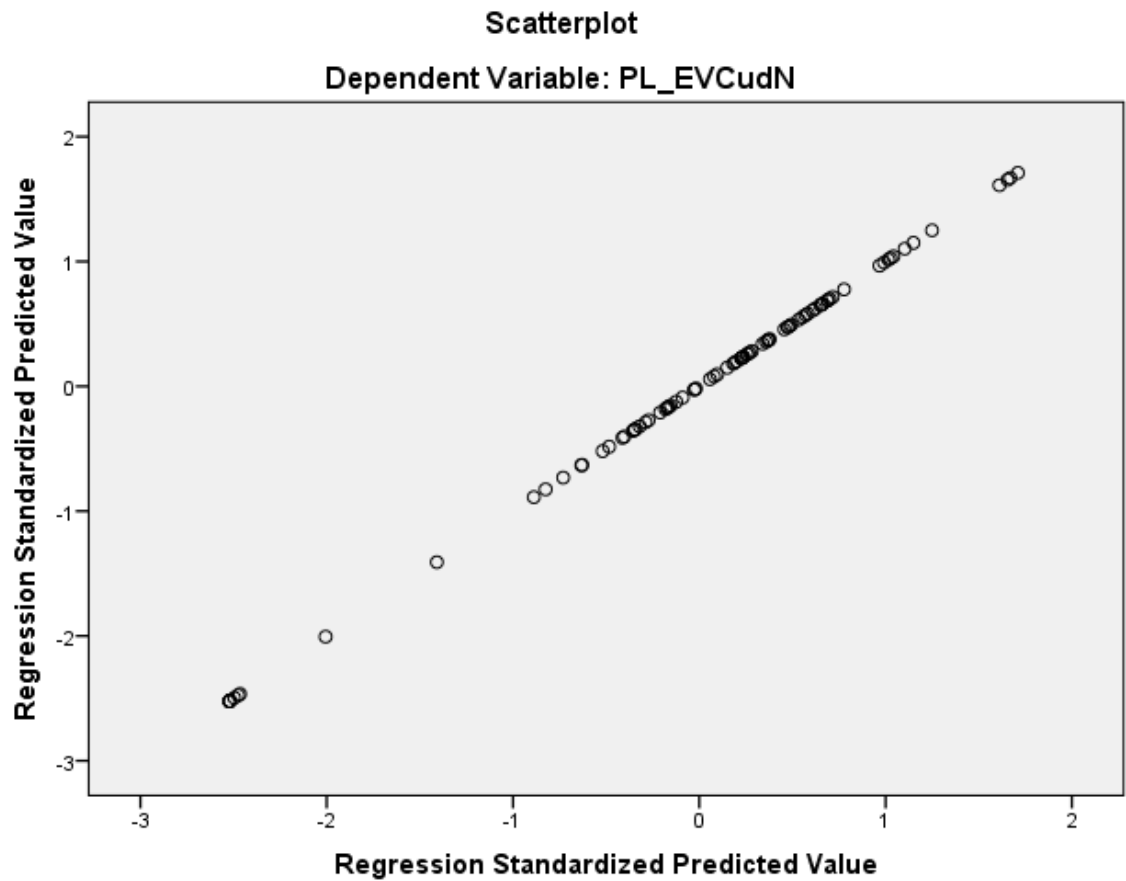
Mahal. Distance	.000	6.362	.989	1.805
Cook's Distance	.000	.089	.009	.014
Centered Leverage Value	.000	.071	.011	.020

#### 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=(*ZPRED ,*ZPRED)

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/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.



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 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=(*ZPRED ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.25
	Elapsed Time	00:00:00.27
	Memory Required	15824 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_TpudN		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	TSpaths_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	GD_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

5		R_ud	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
6	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
7	SMSP_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
8	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCud\_TpudN

### Model Summary<sup>j</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.614 <sup>a</sup>	.377	.370	.00329064684 3205
2	.669 <sup>b</sup>	.448	.435	.00311569292 0046
3	.687 <sup>c</sup>	.472	.454	.00306369747 3327
4	.705 <sup>d</sup>	.497	.474	.00300703486 3625
5	.702 <sup>e</sup>	.493	.476	.00300244801 3092
6	.912 <sup>f</sup>	.832	.825	.00173645966 2263
7	.941 <sup>g</sup>	.886	.879	.00144302736 6352
8	.951 <sup>h</sup>	.904	.897	.00133060205 2071

a. Predictors: (Constant), PL\_TpudN

b. Predictors: (Constant), PL\_TpudN, R\_ud

c. Predictors: (Constant), PL\_TpudN, R\_ud, TSpats\_ud

d. Predictors: (Constant), PL\_TpudN, R\_ud, TSpats\_ud, GD\_ud

e. Predictors: (Constant), PL\_TpudN, TSpats\_ud, GD\_ud

f. Predictors: (Constant), PL\_TpudN, TSpats\_ud, GD\_ud, AvgPL\_ud

g. Predictors: (Constant), PL\_TpudN, TSpats\_ud, GD\_ud, AvgPL\_ud, SMSP\_ud

h. Predictors: (Constant), PL\_TpudN, TSpats\_ud, GD\_ud, AvgPL\_ud, SMSP\_ud, R\_ud

i. Dependent Variable: EVCud\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	53.859	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	35.677	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			
3	Regression	.001	3	.000	25.936	.000 <sup>d</sup>
	Residual	.001	87	.000		
	Total	.002	90			
4	Regression	.001	4	.000	21.270	.000 <sup>e</sup>
	Residual	.001	86	.000		
	Total	.002	90			

5	Regression	.001	3	.000	28.200	.000 <sup>f</sup>
	Residual	.001	87	.000		
	Total	.002	90			
6	Regression	.001	4	.000	106.757	.000 <sup>g</sup>
	Residual	.000	86	.000		
	Total	.002	90			
7	Regression	.001	5	.000	131.577	.000 <sup>h</sup>
	Residual	.000	85	.000		
	Total	.002	90			
8	Regression	.001	6	.000	131.621	.000 <sup>i</sup>
	Residual	.000	84	.000		
	Total	.002	90			

a. Dependent Variable: EVCud\_TpudN

b. Predictors: (Constant), PL\_TpudN

c. Predictors: (Constant), PL\_TpudN, R\_ud

d. Predictors: (Constant), PL\_TpudN, R\_ud, TSpats\_ud

e. Predictors: (Constant), PL\_TpudN, R\_ud, TSpats\_ud, GD\_ud

f. Predictors: (Constant), PL\_TpudN, TSpats\_ud, GD\_ud

g. Predictors: (Constant), PL\_TpudN, TSpats\_ud, GD\_ud, AvgPL\_ud

h. Predictors: (Constant), PL\_TpudN, TSpats\_ud, GD\_ud, AvgPL\_ud, SMSP\_ud

i. Predictors: (Constant), PL\_TpudN, TSpats\_ud, GD\_ud, AvgPL\_ud, SMSP\_ud, R\_ud

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
		B	Std. Error	Beta			Tolerance
1	(Constant)	.006	.001		8.685	.000	
	PL_TpudN	.426	.058	.614	7.339	.000	1.000
2	(Constant)	-.004	.003		-1.207	.231	
	PL_TpudN	.339	.061	.488	5.577	.000	.818
	R_ud	.996	.297	.294	3.358	.001	.818
3	(Constant)	.003	.005		.680	.498	
	PL_TpudN	.332	.060	.478	5.533	.000	.815
	R_ud	.922	.294	.272	3.136	.002	.805
	TSpaths_ud	-.533	.266	-.159	-2.003	.048	.968
4	(Constant)	.009	.005		1.722	.089	
	PL_TpudN	.327	.059	.470	5.546	.000	.813
	R_ud	.344	.401	.102	.857	.394	.417
	TSpaths_ud	-.742	.280	-.221	-2.652	.010	.842
	GD_ud	.240	.116	.236	2.076	.041	.453
5	(Constant)	.013	.003		4.304	.000	
	PL_TpudN	.340	.057	.490	6.008	.000	.877
	TSpaths_ud	-.823	.263	-.245	-3.123	.002	.949
	GD_ud	.309	.083	.304	3.718	.000	.874

6	(Constant)	.008	.002		4.395	.000	
	PL_TpudN	.183	.035	.264	5.257	.000	.775
	TSpaths_ud	-.455	.155	-.135	-2.935	.004	.918
	GD_ud	13.024	.965	12.808	13.498	.000	.002
	AvgPL_ud	-12.463	.945	-12.467	-13.195	.000	.002
7	(Constant)	.009	.001		6.088	.000	
	PL_TpudN	.117	.031	.168	3.779	.000	.683
	TSpaths_ud	-.527	.129	-.157	-4.079	.000	.911
	GD_ud	13.598	.807	13.372	16.850	.000	.002
	AvgPL_ud	-13.091	.791	-13.095	-16.545	.000	.002
8	(Constant)	.000	.003		-.110	.912	
	PL_TpudN	.092	.029	.132	3.156	.002	.652
	R_ud	.798	.200	.236	3.996	.000	.329
	TSpaths_ud	-.299	.132	-.089	-2.259	.026	.740
	GD_ud	14.112	.755	13.877	18.687	.000	.002
	AvgPL_ud	-13.734	.747	-13.738	-18.382	.000	.002
	SMSP_ud	.058	.012	.197	4.660	.000	.644

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	VIF	
1	(Constant)	



	PL_TpudN	1.000
2	(Constant)	
	PL_TpudN	1.223
	R_ud	1.223
3	(Constant)	
	PL_TpudN	1.228
	R_ud	1.242
	TSpaths_ud	1.033
4	(Constant)	
	PL_TpudN	1.230
	R_ud	2.400
	TSpaths_ud	1.187
	GD_ud	2.210
5	(Constant)	
	PL_TpudN	1.141
	TSpaths_ud	1.054
	GD_ud	1.144
6	(Constant)	
	PL_TpudN	1.291
	TSpaths_ud	1.089
	GD_ud	461.884
	AvgPL_ud	457.970
7	(Constant)	

	PL_TpudN	1.464
	TSpaths_ud	1.098
	GD_ud	467.876
	AvgPL_ud	465.388
	SMSP_ud	1.307
8	(Constant)	
	PL_TpudN	1.533
	R_ud	3.038
	TSpaths_ud	1.351
	GD_ud	481.819
	AvgPL_ud	488.024
	SMSP_ud	1.554

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	-.209 <sup>b</sup>	-2.502	.014	-.258	.948	1.055	.948
	Edges_ud	-.205 <sup>b</sup>	-2.462	.016	-.254	.956	1.046	.956
	Den_ud	.134 <sup>b</sup>	1.592	.115	.167	.975	1.025	.975

	CC_ud	.204 <sup>b</sup>	2.328	.022	.241	.871	1.148	.871
	GD_ud	.256 <sup>b</sup>	3.039	.003	.308	.906	1.103	.906
	Tpaths_ud	.110 <sup>b</sup>	1.284	.203	.136	.943	1.060	.943
	TSpaths_ud	-.190 <sup>b</sup>	-2.304	.024	-.238	.984	1.017	.984
	AvgPL_ud	.222 <sup>b</sup>	2.621	.010	.269	.917	1.090	.917
	AvgGL_ud	.141 <sup>b</sup>	1.685	.096	.177	.985	1.015	.985
	PL_TSpud N	-.053 <sup>b</sup>	-.603	.548	-.064	.931	1.074	.931
	S_ud	.263 <sup>b</sup>	3.176	.002	.321	.927	1.079	.927
	R_ud	.294 <sup>b</sup>	3.358	.001	.337	.818	1.223	.818
	SMSP_ud	.206 <sup>b</sup>	2.324	.022	.240	.853	1.172	.853
2	Nodes	-.150 <sup>c</sup>	-1.810	.074	-.191	.889	1.124	.767
	Edges_ud	-.150 <sup>c</sup>	-1.827	.071	-.192	.905	1.105	.774
	Den_ud	.087 <sup>c</sup>	1.065	.290	.113	.942	1.062	.790
	CC_ud	.105 <sup>c</sup>	1.134	.260	.121	.727	1.375	.683
	GD_ud	.127 <sup>c</sup>	1.162	.248	.124	.520	1.923	.469
	Tpaths_ud	-.053 <sup>c</sup>	-.546	.586	-.058	.668	1.496	.580
	TSpaths_ud	-.159 <sup>c</sup>	-2.003	.048	-.210	.968	1.033	.805
	AvgPL_ud	.069 <sup>c</sup>	.623	.535	.067	.520	1.924	.463
	AvgGL_ud	-.018 <sup>c</sup>	-.184	.854	-.020	.665	1.504	.552
	PL_TSpud N	-.163 <sup>c</sup>	-1.895	.061	-.199	.827	1.209	.727
	S_ud	.146 <sup>c</sup>	1.366	.175	.145	.546	1.830	.482

	SMSP_ud	.099 <sup>c</sup>	1.037	.303	.110	.691	1.447	.663
3	Nodes	-.064 <sup>d</sup>	-.538	.592	-.058	.428	2.338	.428
	Edges_ud	-.065 <sup>d</sup>	-.536	.594	-.058	.419	2.386	.419
	Den_ud	-.179 <sup>d</sup>	-1.177	.243	-.126	.262	3.815	.262
	CC_ud	.130 <sup>d</sup>	1.417	.160	.151	.716	1.397	.664
	GD_ud	.236 <sup>d</sup>	2.076	.041	.218	.453	2.210	.417
	Tpaths_ud	.104 <sup>d</sup>	.856	.394	.092	.415	2.410	.415
	AvgPL_ud	.174 <sup>d</sup>	1.506	.136	.160	.447	2.239	.408
	AvgGL_ud	.096 <sup>d</sup>	.883	.380	.095	.511	1.957	.465
	PL_TSpud N	-.128 <sup>d</sup>	-1.449	.151	-.154	.774	1.292	.696
	S_ud	.056 <sup>d</sup>	.458	.648	.049	.415	2.407	.415
	SMSP_ud	.152 <sup>d</sup>	1.592	.115	.169	.652	1.535	.631
4	Nodes	.013 <sup>e</sup>	.103	.918	.011	.386	2.590	.367
	Edges_ud	.015 <sup>e</sup>	.120	.905	.013	.376	2.656	.352
	Den_ud	-.075 <sup>e</sup>	-.463	.645	-.050	.227	4.413	.227
	CC_ud	.157 <sup>e</sup>	1.738	.086	.185	.704	1.420	.353
	Tpaths_ud	-2.326 <sup>e</sup>	-5.464	.000	-.510	.024	41.407	.024
	AvgPL_ud	-13.643 <sup>e</sup>	-16.375	.000	-.871	.002	487.663	.002
	AvgGL_ud	-.090 <sup>e</sup>	-.631	.529	-.068	.287	3.488	.254
	PL_TSpud N	-.136 <sup>e</sup>	-1.579	.118	-.169	.773	1.294	.392
	S_ud	.102 <sup>e</sup>	.844	.401	.091	.403	2.483	.263
	SMSP_ud	.175 <sup>e</sup>	1.868	.065	.199	.644	1.553	.345

5	Nodes	.018 <sup>f</sup>	.144	.886	.016	.387	2.584	.387
	Edges_ud	.023 <sup>f</sup>	.183	.855	.020	.379	2.642	.379
	Den_ud	-.018 <sup>f</sup>	-.119	.905	-.013	.261	3.824	.261
	CC_ud	.161 <sup>f</sup>	1.950	.054	.206	.831	1.203	.801
	Tpaths_ud	-2.345 <sup>f</sup>	-5.557	.000	-.514	.024	41.055	.024
	AvgPL_ud	-12.467 <sup>f</sup>	-13.195	.000	-.818	.002	457.970	.002
	AvgGL_ud	-.063 <sup>f</sup>	-.446	.657	-.048	.299	3.346	.296
	PL_TSpud N	-.110 <sup>f</sup>	-1.315	.192	-.140	.822	1.217	.802
	S_ud	.114 <sup>f</sup>	1.197	.235	.128	.639	1.565	.639
	R_ud	.102 <sup>f</sup>	.857	.394	.092	.417	2.400	.417
	SMSP_ud	.176 <sup>f</sup>	2.072	.041	.218	.778	1.286	.778
6	Nodes	-.076 <sup>g</sup>	-1.068	.288	-.115	.383	2.610	.002
	Edges_ud	-.060 <sup>g</sup>	-.829	.409	-.090	.376	2.662	.002
	Den_ud	.162 <sup>g</sup>	1.879	.064	.200	.255	3.918	.002
	CC_ud	.245 <sup>g</sup>	5.932	.000	.541	.818	1.222	.002
	Tpaths_ud	-.301 <sup>g</sup>	-.870	.387	-.094	.016	61.255	.001
	AvgGL_ud	.035 <sup>g</sup>	.435	.665	.047	.296	3.374	.002
	PL_TSpud N	.032 <sup>g</sup>	.637	.526	.069	.783	1.278	.002
	S_ud	.227 <sup>g</sup>	4.490	.000	.438	.625	1.600	.002
	R_ud	.345 <sup>g</sup>	5.724	.000	.527	.391	2.555	.002
	SMSP_ud	.264 <sup>g</sup>	6.287	.000	.563	.765	1.307	.002
7	Nodes	-.055 <sup>h</sup>	-.933	.354	-.101	.382	2.618	.002

	Edges_ud	-.053 <sup>h</sup>	-.884	.379	-.096	.376	2.663	.002
	Den_ud	.033 <sup>h</sup>	.427	.671	.047	.234	4.276	.002
	CC_ud	-.028 <sup>h</sup>	-.175	.861	-.019	.052	19.085	.002
	Tpaths_ud	-.130 <sup>h</sup>	-.449	.655	-.049	.016	61.816	.001
	AvgGL_ud	.091 <sup>h</sup>	1.345	.182	.145	.292	3.430	.002
	PL_TSpud N	.053 <sup>h</sup>	1.270	.207	.137	.778	1.286	.002
	S_ud	.061 <sup>h</sup>	.994	.323	.108	.354	2.823	.002
	R_ud	.236 <sup>h</sup>	3.996	.000	.400	.329	3.038	.002
8	Nodes	-.080 <sup>i</sup>	-1.457	.149	-.158	.378	2.649	.002
	Edges_ud	-.080 <sup>i</sup>	-1.441	.153	-.156	.371	2.699	.002
	Den_ud	-.042 <sup>i</sup>	-.582	.562	-.064	.218	4.580	.002
	CC_ud	.000 <sup>i</sup>	.003	.997	.000	.052	19.130	.002
	Tpaths_ud	.184 <sup>i</sup>	.660	.511	.072	.015	67.135	.001
	AvgGL_ud	.028 <sup>i</sup>	.425	.672	.047	.272	3.679	.002
	PL_TSpud N	.014 <sup>i</sup>	.363	.717	.040	.727	1.375	.002
	S_ud	-.063 <sup>i</sup>	-.975	.332	-.106	.271	3.684	.002

a. Dependent Variable: EVCud\_TpudN

b. Predictors in the Model: (Constant), PL\_TpudN

c. Predictors in the Model: (Constant), PL\_TpudN, R\_ud

d. Predictors in the Model: (Constant), PL\_TpudN, R\_ud, TSpudN

e. Predictors in the Model: (Constant), PL\_TpudN, R\_ud, TSpudN, GD\_ud

f. Predictors in the Model: (Constant), PL\_TpudN, TSpaths\_ud, GD\_ud

g. Predictors in the Model: (Constant), PL\_TpudN, TSpaths\_ud, GD\_ud, AvgPL\_ud

h. Predictors in the Model: (Constant), PL\_TpudN, TSpaths\_ud, GD\_ud, AvgPL\_ud, SMSP\_ud

i. Predictors in the Model: (Constant), PL\_TpudN, TSpaths\_ud, GD\_ud, AvgPL\_ud, SMSP\_ud, R\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	PL_TpudN	R_ud	TSpaths_ud
1	1	1.880	1.000	.06	.06		
	2	.120	3.955	.94	.94		
2	1	2.848	1.000	.00	.02	.00	
	2	.147	4.406	.02	.86	.01	
	3	.005	23.042	.98	.12	.99	
3	1	3.811	1.000	.00	.01	.00	.00
	2	.173	4.692	.00	.81	.00	.01
	3	.012	17.678	.00	.15	.40	.47
	4	.003	33.890	1.00	.03	.59	.52
4	1	4.734	1.000	.00	.01	.00	.00
	2	.174	5.217	.00	.84	.00	.01
	3	.079	7.744	.00	.05	.00	.01
	4	.011	20.783	.02	.09	.20	.47
	5	.002	48.263	.98	.02	.80	.51

5	1	3.748	1.000	.00	.01		.00
	2	.168	4.724	.01	.88		.01
	3	.078	6.921	.02	.05		.02
	4	.006	25.379	.97	.06		.97
6	1	4.697	1.000	.00	.01		.00
	2	.174	5.189	.00	.82		.00
	3	.123	6.190	.02	.00		.02
	4	.006	28.406	.93	.05		.94
	5	.000	188.534	.05	.12		.03
7	1	5.211	1.000	.00	.00		.00
	2	.506	3.209	.00	.00		.00
	3	.165	5.620	.00	.74		.00
	4	.113	6.796	.02	.05		.03
	5	.006	30.230	.94	.07		.94
	6	.000	199.996	.04	.13		.03
8	1	6.181	1.000	.00	.00	.00	.00
	2	.520	3.447	.00	.00	.00	.00
	3	.165	6.113	.00	.73	.00	.00
	4	.120	7.164	.00	.04	.00	.01
	5	.011	23.707	.01	.07	.16	.42
	6	.002	61.136	.90	.00	.80	.50
	7	.000	222.520	.08	.15	.04	.06



### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions		
		GD_ud	AvgPL_ud	SMSP_ud
1	1			
	2			
2	1			
	2			
	3			
3	1			
	2			
	3			
	4			
4	1	.00		
	2	.00		
	3	.53		
	4	.06		
	5	.41		
5	1	.01		
	2	.01		
	3	.98		
	4	.01		
6	1	.00	.00	
	2	.00	.00	

	3	.00	.00	
	4	.00	.00	
	5	1.00	1.00	
7	1	.00	.00	.01
	2	.00	.00	.79
	3	.00	.00	.06
	4	.00	.00	.11
	5	.00	.00	.02
	6	1.00	1.00	.01
8	1	.00	.00	.01
	2	.00	.00	.66
	3	.00	.00	.06
	4	.00	.00	.09
	5	.00	.00	.00
	6	.00	.00	.19
	7	1.00	1.00	.00

a. Dependent Variable: EVCud\_TpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	.00107269792 3519	.01740404218 4353	.01098901098 9011	.00394153280 0545
Std. Predicted Value	-2.516	1.628	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00193597190 0821	.01757476292 5506	.01100088475 6875	.00391620986 6505
Residual	- .00341820693 5748	.00643651932 4780	.00000000000 0000	.00128548370 9054
Std. Residual	-2.569	4.837	.000	.966
Stud. Residual	-2.728	5.102	-.004	1.027
Deleted Residual	- .00385533156 8047	.00716039258 9867	- .00001187376 7864	.00145691871 8930
Stud. Deleted Residual	-2.841	6.105	.005	1.100
Mahal. Distance	1.009	39.143	5.934	5.720
Cook's Distance	.000	.418	.020	.056
Centered Leverage Value	.011	.435	.066	.064

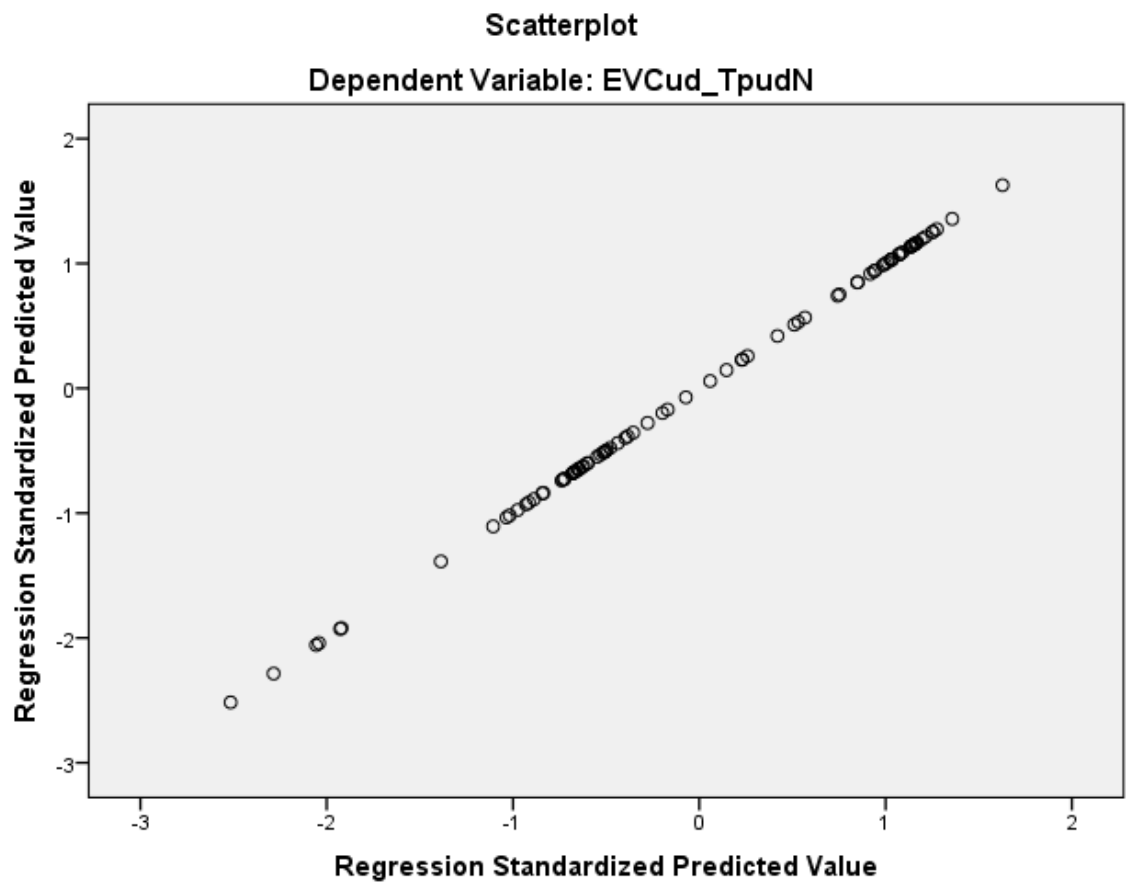
#### Residuals Statistics<sup>a</sup>

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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: 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=(\*ZPRED ,\*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 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=(*ZPRED ,*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	AvgGL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	PL_TpudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
4	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).



a. Dependent Variable: EVCud\_TSpudN

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.508 <sup>a</sup>	.259	.250	.00037932631 2809
2	.572 <sup>b</sup>	.327	.312	.00036333511 3043
3	.601 <sup>c</sup>	.362	.340	.00035599083 0499
4	.629 <sup>d</sup>	.395	.367	.00034846849 2258

a. Predictors: (Constant), AvgGL\_ud

b. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud

c. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud, PL\_TpudN

d. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud, PL\_TpudN, R\_ud

e. Dependent Variable: EVCud\_TSpudN

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.000	1	.000	31.030	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	21.414	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	16.427	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.000	90			
4	Regression	.000	4	.000	14.057	.000 <sup>e</sup>
	Residual	.000	86	.000		
	Total	.000	90			

a. Dependent Variable: EVCud\_TSpudN

b. Predictors: (Constant), AvgGL\_ud

c. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud

d. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud, PL\_TpudN

e. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud, PL\_TpudN, R\_ud

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.012	.000		80.151	.000
	AvgGL_ud	-.072	.013	-.508	-5.570	.000
2	(Constant)	.012	.000		83.507	.000
	AvgGL_ud	-.124	.021	-.877	-5.816	.000
	AvgPL_ud	.048	.016	.453	3.001	.003
3	(Constant)	.012	.000		78.814	.000
	AvgGL_ud	-.133	.021	-.943	-6.248	.000
	AvgPL_ud	.059	.017	.563	3.599	.001
	PL_TpudN	-.014	.007	-.197	-2.161	.033
4	(Constant)	.011	.000		28.317	.000
	AvgGL_ud	-.136	.021	-.965	-6.520	.000
	AvgPL_ud	.044	.018	.414	2.470	.015
	PL_TpudN	-.020	.007	-.267	-2.815	.006
	R_ud	.097	.044	.270	2.190	.031

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_ud	1.000	1.000
2	(Constant)		
	AvgGL_ud	.336	2.978

	AvgPL_ud	.336	2.978
3	(Constant)		
	AvgGL_ud	.322	3.102
	AvgPL_ud	.300	3.330
	PL_TpudN	.881	1.136
4	(Constant)		
	AvgGL_ud	.321	3.117
	AvgPL_ud	.251	3.989
	PL_TpudN	.781	1.280
	R_ud	.461	2.169

a. Dependent Variable: EVCud\_TSpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.053 <sup>b</sup>	-.579	.564	-.062	.995	1.005	.995
	Edges_ud	-.048 <sup>b</sup>	-.527	.600	-.056	.997	1.003	.997
	Den_ud	.138 <sup>b</sup>	1.470	.145	.155	.930	1.075	.930
	CC_ud	.099 <sup>b</sup>	1.065	.290	.113	.971	1.030	.971
	GD_ud	.438 <sup>b</sup>	2.935	.004	.299	.344	2.905	.344

	Tpaths_ud	.334 <sup>b</sup>	2.313	.023	.239	.381	2.627	.381
	TSpaths_ud	-.148 <sup>b</sup>	-1.560	.122	-.164	.910	1.099	.910
	AvgPL_ud	.453 <sup>b</sup>	3.001	.003	.305	.336	2.978	.336
	PL_TpudN	-.090 <sup>b</sup>	-.982	.329	-.104	.985	1.015	.985
	PL_TSpud N	-.041 <sup>b</sup>	-.412	.682	-.044	.844	1.185	.844
	S_ud	.085 <sup>b</sup>	.899	.371	.095	.933	1.072	.933
	R_ud	.272 <sup>b</sup>	2.535	.013	.261	.682	1.467	.682
	SMSP_ud	.074 <sup>b</sup>	.785	.435	.083	.953	1.049	.953
2	Nodes	.000 <sup>c</sup>	-.004	.997	.000	.955	1.047	.322
	Edges_ud	.001 <sup>c</sup>	.014	.989	.001	.961	1.040	.324
	Den_ud	.124 <sup>c</sup>	1.378	.172	.146	.928	1.078	.323
	CC_ud	.026 <sup>c</sup>	.275	.784	.030	.894	1.118	.309
	GD_ud	-.979 <sup>c</sup>	-.564	.574	-.060	.003	390.472	.002
	Tpaths_ud	-.181 <sup>c</sup>	-.603	.548	-.065	.085	11.731	.075
	TSpaths_ud	-.104 <sup>c</sup>	-1.124	.264	-.120	.884	1.131	.304
	PL_TpudN	-.197 <sup>c</sup>	-2.161	.033	-.226	.881	1.136	.300
	PL_TSpud N	-.070 <sup>c</sup>	-.733	.465	-.078	.836	1.196	.327
	S_ud	.046 <sup>c</sup>	.498	.619	.053	.913	1.096	.328
	R_ud	.154 <sup>c</sup>	1.272	.207	.135	.520	1.924	.256
	SMSP_ud	-.016 <sup>c</sup>	-.166	.868	-.018	.852	1.174	.300
3	Nodes	-.033 <sup>d</sup>	-.371	.712	-.040	.928	1.078	.294

	Edges_ud	-.029 <sup>d</sup>	-.322	.748	-.035	.938	1.066	.295
	Den_ud	.168 <sup>d</sup>	1.876	.064	.198	.894	1.119	.300
	CC_ud	.087 <sup>d</sup>	.924	.358	.099	.824	1.213	.289
	GD_ud	.412 <sup>d</sup>	.226	.822	.024	.002	450.597	.002
	Tpaths_ud	-.264 <sup>d</sup>	-.892	.375	-.096	.084	11.915	.070
	TSpaths_ud	-.132 <sup>d</sup>	-1.443	.153	-.154	.870	1.150	.296
	PL_TSpud N	-.028 <sup>d</sup>	-.290	.773	-.031	.797	1.255	.300
	S_ud	.091 <sup>d</sup>	.997	.322	.107	.871	1.148	.299
	R_ud	.270 <sup>d</sup>	2.190	.031	.230	.461	2.169	.251
	SMSP_ud	.047 <sup>d</sup>	.482	.631	.052	.778	1.285	.284
4	Nodes	.013 <sup>e</sup>	.145	.885	.016	.875	1.143	.250
	Edges_ud	.015 <sup>e</sup>	.170	.865	.018	.890	1.124	.250
	Den_ud	.095 <sup>e</sup>	.930	.355	.100	.676	1.479	.237
	CC_ud	.015 <sup>e</sup>	.155	.877	.017	.714	1.400	.250
	GD_ud	.902 <sup>e</sup>	.501	.618	.054	.002	457.419	.002
	Tpaths_ud	-.015 <sup>e</sup>	-.046	.963	-.005	.071	14.145	.051
	TSpaths_ud	-.066 <sup>e</sup>	-.676	.501	-.073	.742	1.347	.250
	PL_TSpud N	-.062 <sup>e</sup>	-.652	.516	-.071	.777	1.287	.250
	S_ud	-.070 <sup>e</sup>	-.578	.565	-.063	.488	2.050	.234
	SMSP_ud	-.030 <sup>e</sup>	-.297	.767	-.032	.681	1.468	.249

a. Dependent Variable: EVCud\_TSpudN

b. Predictors in the Model: (Constant), AvgGL\_ud

c. Predictors in the Model: (Constant), AvgGL\_ud, AvgPL\_ud

d. Predictors in the Model: (Constant), AvgGL\_ud, AvgPL\_ud, PL\_TpudN

e. Predictors in the Model: (Constant), AvgGL\_ud, AvgPL\_ud, PL\_TpudN, R\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_ud	AvgPL_ud
1	1	1.963	1.000	.02	.02	
	2	.037	7.252	.98	.98	
2	1	2.919	1.000	.01	.00	.00
	2	.066	6.673	.66	.01	.24
	3	.016	13.559	.33	.99	.76
3	1	3.748	1.000	.00	.00	.00
	2	.173	4.648	.01	.02	.02
	3	.064	7.627	.58	.00	.21
	4	.014	16.119	.40	.98	.77
4	1	4.728	1.000	.00	.00	.00
	2	.176	5.177	.00	.01	.01
	3	.077	7.860	.04	.02	.17
	4	.015	17.492	.01	.96	.58
	5	.003	37.160	.95	.01	.23

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions	
		PL_TpudN	R_ud
1	1		
	2		
2	1		
	2		
	3		
3	1	.01	
	2	.86	
	3	.02	
	4	.10	
4	1	.01	.00
	2	.80	.00
	3	.02	.01
	4	.10	.02
	5	.07	.97

a. Dependent Variable: EVCud\_TSpudN

### Residuals Statistics<sup>a</sup>



	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00980347488 0755	.01137184444 8149	.01098901098 9011	.00027543687 9402
Std. Predicted Value	-4.304	1.390	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00916779413 8193	.01139527000 4869	.01098435877 3941	.00030251370 3583
Residual	- .00126961362 5482	.00128267647 2329	.00000000000 0000	.00034063673 9525
Std. Residual	-3.643	3.681	.000	.978
Stud. Residual	-3.791	4.502	.006	1.056
Deleted Residual	- .00137421465 4788	.00191835709 8475	.00000465221 5069	.00040101121 9695
Stud. Deleted Residual	-4.129	5.119	.005	1.128
Mahal. Distance	.349	28.834	3.956	4.438
Cook's Distance	.000	2.008	.041	.216
Centered Leverage Value	.004	.320	.044	.049

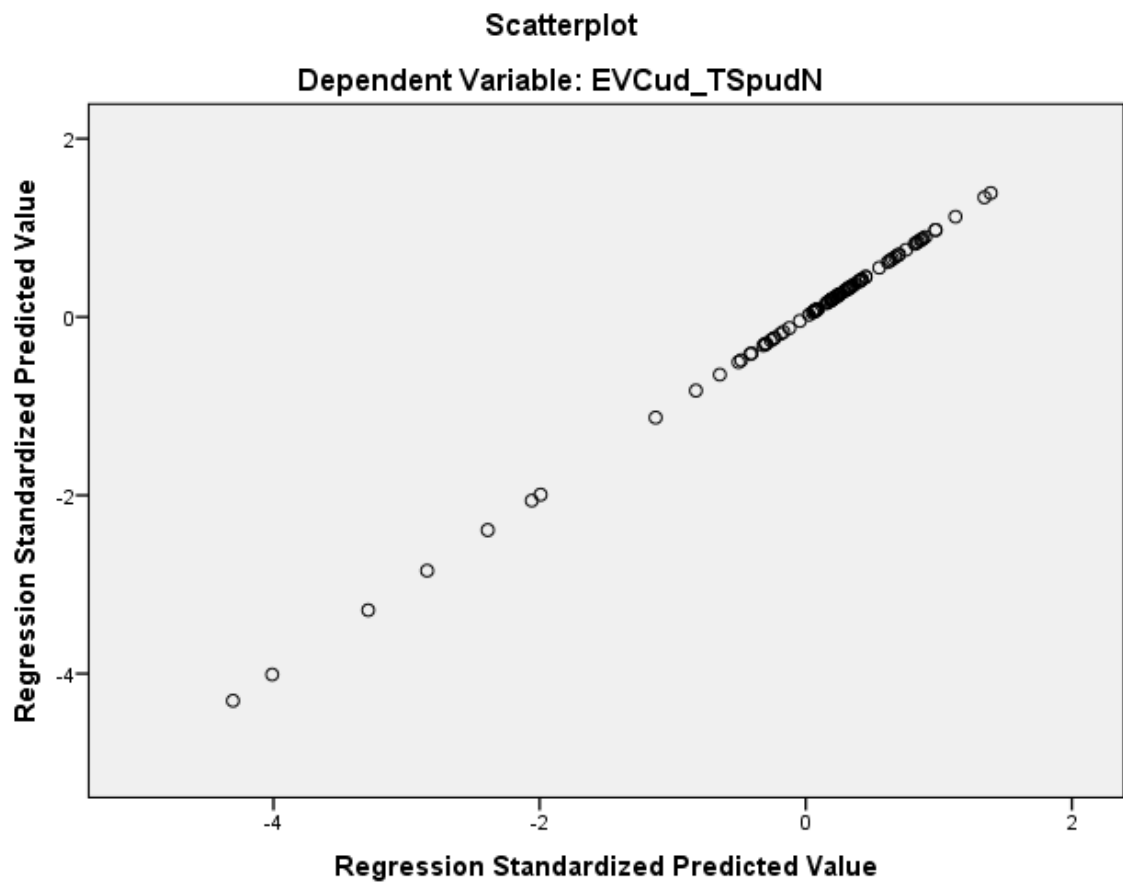
#### Residuals Statistics<sup>a</sup>

	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\_TSpudN

## 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 TSpudN\_ud AvgPL\_ud  
AvgGL\_ud PL\_TspudN PL\_TSpudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZPRED ,\*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 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=(*ZPRED ,*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	AvgGL_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_TpudN		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\_TSpudN

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.619 <sup>a</sup>	.383	.376	.00034779961 0333
2	.687 <sup>b</sup>	.472	.460	.00032357826 8739
3	.710 <sup>c</sup>	.504	.487	.00031553083 9487
4	.736 <sup>d</sup>	.542	.520	.00030506395 0178

a. Predictors: (Constant), AvgGL\_ud

b. Predictors: (Constant), AvgGL\_ud, R\_ud

c. Predictors: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN

d. Predictors: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN, Tpaths\_ud

e. Dependent Variable: EVCud\_TSpudN

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.000	1	.000	54.698	.000 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			
2	Regression	.000	2	.000	38.930	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.000	89			
3	Regression	.000	3	.000	29.126	.000 <sup>d</sup>
	Residual	.000	86	.000		
	Total	.000	89			
4	Regression	.000	4	.000	25.120	.000 <sup>e</sup>
	Residual	.000	85	.000		
	Total	.000	89			

a. Dependent Variable: EVCud\_TSpudN

b. Predictors: (Constant), AvgGL\_ud

c. Predictors: (Constant), AvgGL\_ud, R\_ud

d. Predictors: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN

e. Predictors: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN, Tpaths\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------



		B	Std. Error	Beta		
1	(Constant)	.012	.000		77.647	.000
	AvgGL_ud	-.104	.014	-.619	-7.396	.000
2	(Constant)	.011	.000		35.052	.000
	AvgGL_ud	-.138	.016	-.825	-8.716	.000
	R_ud	.132	.034	.363	3.830	.000
3	(Constant)	.011	.000		34.000	.000
	AvgGL_ud	-.142	.016	-.845	-9.116	.000
	R_ud	.168	.037	.463	4.549	.000
	PL_TpudN	-.015	.006	-.200	-2.344	.021
4	(Constant)	.011	.000		35.266	.000
	AvgGL_ud	-.174	.019	-1.041	-8.957	.000
	R_ud	.151	.036	.416	4.168	.000
	PL_TpudN	-.017	.006	-.229	-2.756	.007
	Tpaths_ud	.046	.017	.305	2.646	.010

#### Coefficients<sup>a</sup>

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_ud	1.000	1.000
2	(Constant)		
	AvgGL_ud	.676	1.479

	R_ud	.676	1.479
3	(Constant)		
	AvgGL_ud	.671	1.491
	R_ud	.557	1.794
	PL_TpudN	.796	1.257
4	(Constant)		
	AvgGL_ud	.399	2.506
	R_ud	.540	1.851
	PL_TpudN	.782	1.279
	Tpaths_ud	.407	2.456

a. Dependent Variable: EVCud\_TSpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.066 <sup>b</sup>	-.780	.438	-.083	.994	1.006	.994
	Edges_ud	-.057 <sup>b</sup>	-.683	.497	-.073	.996	1.004	.996
	Den_ud	.102 <sup>b</sup>	1.168	.246	.124	.924	1.082	.924
	CC_ud	.159 <sup>b</sup>	1.877	.064	.197	.948	1.054	.948
	GD_ud	.431 <sup>b</sup>	3.512	.001	.352	.413	2.423	.413

	Tpaths_ud	.357 <sup>b</sup>	2.959	.004	.302	.442	2.264	.442
	TSpaths_ud	-.100 <sup>b</sup>	-1.138	.258	-.121	.897	1.115	.897
	AvgPL_ud	.441 <sup>b</sup>	3.569	.001	.357	.405	2.471	.405
	PL_TpudN	-.037 <sup>b</sup>	-.434	.666	-.046	.966	1.035	.966
	PL_TSpud N	.017 <sup>b</sup>	.184	.854	.020	.833	1.200	.833
	S_ud	.149 <sup>b</sup>	1.713	.090	.181	.908	1.101	.908
	R_ud	.363 <sup>b</sup>	3.830	.000	.380	.676	1.479	.676
	SMSP_ud	.158 <sup>b</sup>	1.828	.071	.192	.913	1.096	.913
2	Nodes	.039 <sup>c</sup>	.469	.641	.050	.882	1.134	.600
	Edges_ud	.042 <sup>c</sup>	.509	.612	.055	.895	1.117	.608
	Den_ud	-.077 <sup>c</sup>	-.816	.417	-.088	.683	1.464	.492
	CC_ud	.017 <sup>c</sup>	.185	.854	.020	.733	1.365	.523
	GD_ud	.268 <sup>c</sup>	1.966	.052	.207	.315	3.173	.315
	Tpaths_ud	.262 <sup>c</sup>	2.215	.029	.232	.414	2.413	.409
	TSpaths_ud	.059 <sup>c</sup>	.631	.529	.068	.703	1.423	.491
	AvgPL_ud	.279 <sup>c</sup>	2.024	.046	.213	.309	3.241	.309
	PL_TpudN	-.200 <sup>c</sup>	-2.344	.021	-.245	.796	1.257	.557
	PL_TSpud N	-.056 <sup>c</sup>	-.642	.523	-.069	.794	1.259	.636
	S_ud	-.095 <sup>c</sup>	-.880	.381	-.094	.524	1.908	.390
	SMSP_ud	.010 <sup>c</sup>	.106	.915	.011	.701	1.427	.519
3	Nodes	.022 <sup>d</sup>	.269	.788	.029	.875	1.143	.515

	Edges_ud	.027 <sup>d</sup>	.334	.740	.036	.889	1.125	.519
	Den_ud	-.076 <sup>d</sup>	-.827	.410	-.089	.683	1.465	.432
	CC_ud	.052 <sup>d</sup>	.576	.566	.062	.713	1.402	.470
	GD_ud	.338 <sup>d</sup>	2.535	.013	.265	.304	3.285	.304
	Tpaths_ud	.305 <sup>d</sup>	2.646	.010	.276	.407	2.456	.399
	TSpaths_ud	.058 <sup>d</sup>	.638	.525	.069	.703	1.423	.455
	AvgPL_ud	.334 <sup>d</sup>	2.485	.015	.260	.302	3.314	.302
	PL_TSpud N	-.028 <sup>d</sup>	-.326	.745	-.035	.778	1.286	.546
	S_ud	-.111 <sup>d</sup>	-1.054	.295	-.114	.522	1.916	.338
	SMSP_ud	.051 <sup>d</sup>	.546	.586	.059	.677	1.477	.470
4	Nodes	-.028 <sup>e</sup>	-.349	.728	-.038	.827	1.210	.385
	Edges_ud	-.025 <sup>e</sup>	-.309	.758	-.034	.836	1.196	.383
	Den_ud	.080 <sup>e</sup>	.744	.459	.081	.470	2.126	.280
	CC_ud	.031 <sup>e</sup>	.358	.721	.039	.708	1.413	.394
	GD_ud	.129 <sup>e</sup>	.464	.644	.051	.071	14.154	.071
	TSpaths_ud	-.059 <sup>e</sup>	-.602	.549	-.066	.558	1.792	.323
	AvgPL_ud	.084 <sup>e</sup>	.276	.783	.030	.059	16.917	.059
	PL_TSpud N	-.037 <sup>e</sup>	-.438	.662	-.048	.777	1.287	.386
	S_ud	.038 <sup>e</sup>	.317	.752	.035	.384	2.607	.262
	SMSP_ud	.007 <sup>e</sup>	.081	.936	.009	.654	1.528	.393

a. Dependent Variable: EVCud\_TSpudN

b. Predictors in the Model: (Constant), AvgGL\_ud

c. Predictors in the Model: (Constant), AvgGL\_ud, R\_ud

d. Predictors in the Model: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN

e. Predictors in the Model: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN, Tpaths\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_ud	R_ud
1	1	1.972	1.000	.01	.01	
	2	.028	8.388	.99	.99	
2	1	2.965	1.000	.00	.00	.00
	2	.031	9.853	.11	.79	.02
	3	.005	24.508	.89	.21	.98
3	1	3.802	1.000	.00	.00	.00
	2	.163	4.825	.01	.02	.00
	3	.030	11.174	.11	.76	.01
	4	.004	29.908	.88	.21	.98
4	1	4.767	1.000	.00	.00	.00
	2	.170	5.289	.00	.01	.00
	3	.043	10.504	.10	.08	.02
	4	.015	17.990	.01	.85	.00
	5	.004	33.696	.89	.07	.98

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions	
		PL_TpudN	Tpaths_ud
1	1		
	2		
2	1		
	2		
	3		
3	1	.01	
	2	.84	
	3	.00	
	4	.14	
4	1	.01	.00
	2	.84	.01
	3	.00	.21
	4	.02	.77
	5	.13	.02

a. Dependent Variable: EVCud\_TSpudN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00945794489 2347	.01137244980 7823	.01098793165 2723	.00032413957 6917
Std. Predicted Value	-4.720	1.186	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00947636831 5518	.01139751169 8306	.01098668766 6629	.00032873793 5091
Residual	- .00113026378 6763	.00119215506 1290	.00000000000 0000	.00029812977 2745
Std. Residual	-3.705	3.908	.000	.977
Stud. Residual	-3.852	4.430	.002	1.037
Deleted Residual	- .00122193782 5903	.00153187592 5139	.00000124398 6094	.00033697788 2619
Stud. Deleted Residual	-4.215	5.021	.002	1.113
Mahal. Distance	.354	25.081	3.956	4.305
Cook's Distance	.000	1.118	.028	.127
Centered Leverage Value	.004	.282	.044	.048

#### Residuals Statistics<sup>a</sup>

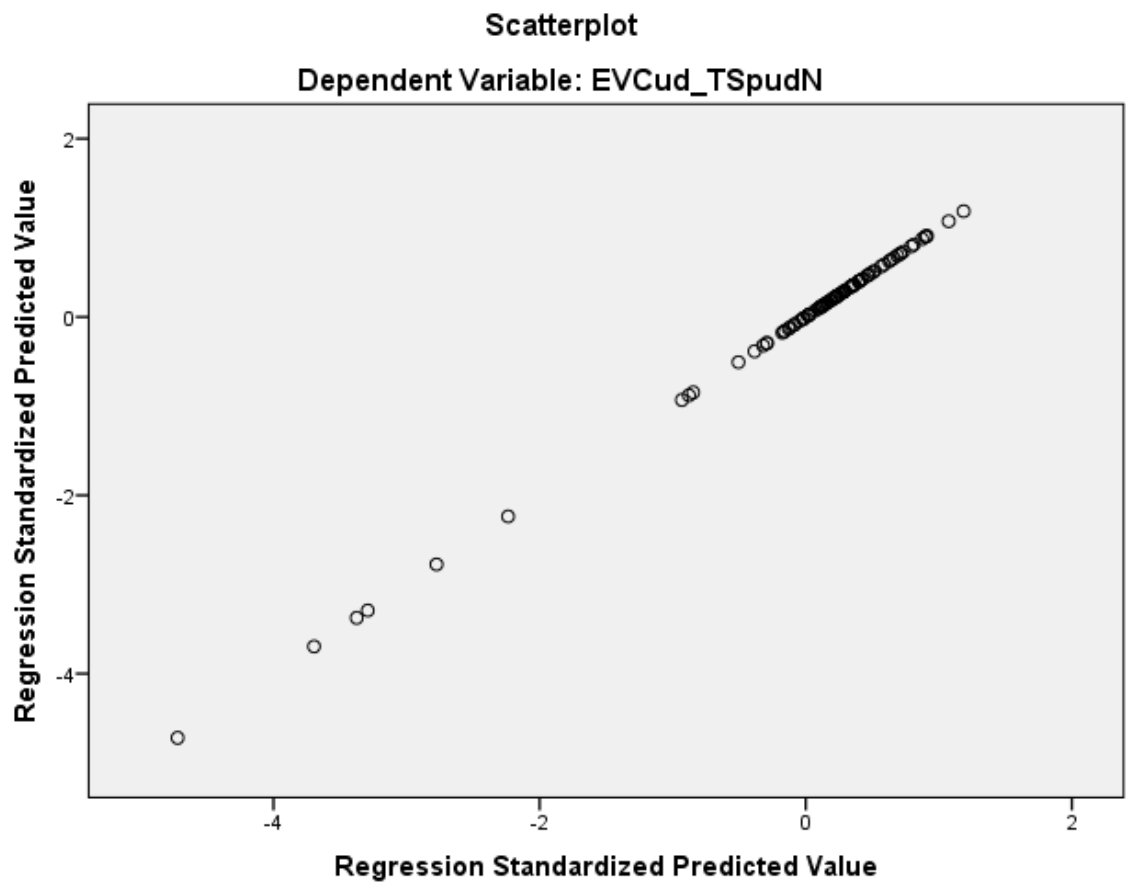
	N
Predicted Value	90
Std. Predicted Value	90
Standard Error of Predicted Value	90

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\_TSpudN

**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 TSpudN\_ud AvgPL\_ud  
AvgGL\_ud PL\_TspudN PL\_TspudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZPRED ,\*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 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=(*ZPRED ,*ZPRED)  /SAVE COOK.
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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).
2	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	PL_TpudN		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\_TSpudN

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.699 <sup>a</sup>	.489	.483	.00031833520 0289
2	.773 <sup>b</sup>	.597	.588	.00028416236 4872
3	.791 <sup>c</sup>	.626	.613	.00027546522 8424
4	.805 <sup>d</sup>	.647	.631	.00026913016 0216

a. Predictors: (Constant), AvgGL\_ud

b. Predictors: (Constant), AvgGL\_ud, R\_ud

c. Predictors: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN

d. Predictors: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN, Tpaths\_ud

e. Dependent Variable: EVCud\_TSpudN

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.000	1	.000	83.239	.000 <sup>b</sup>
	Residual	.000	87	.000		
	Total	.000	88			
2	Regression	.000	2	.000	63.823	.000 <sup>c</sup>
	Residual	.000	86	.000		
	Total	.000	88			
3	Regression	.000	3	.000	47.450	.000 <sup>d</sup>
	Residual	.000	85	.000		
	Total	.000	88			
4	Regression	.000	4	.000	38.545	.000 <sup>e</sup>
	Residual	.000	84	.000		
	Total	.000	88			

a. Dependent Variable: EVCud\_TSpudN

b. Predictors: (Constant), AvgGL\_ud

c. Predictors: (Constant), AvgGL\_ud, R\_ud

d. Predictors: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN

e. Predictors: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN, Tpaths\_ud

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.012	.000		79.313	.000
	AvgGL_ud	-.130	.014	-.699	-9.124	.000
2	(Constant)	.011	.000		40.248	.000
	AvgGL_ud	-.171	.015	-.918	-11.177	.000
	R_ud	.146	.030	.396	4.815	.000
3	(Constant)	.011	.000		39.300	.000
	AvgGL_ud	-.174	.015	-.933	-11.686	.000
	R_ud	.180	.032	.489	5.579	.000
	PL_TpudN	-.014	.005	-.190	-2.553	.012
4	(Constant)	.011	.000		40.287	.000
	AvgGL_ud	-.196	.018	-1.057	-11.081	.000
	R_ud	.167	.032	.452	5.191	.000
	PL_TpudN	-.016	.005	-.213	-2.899	.005
	Tpaths_ud	.035	.016	.212	2.247	.027

#### Coefficients<sup>a</sup>

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_ud	1.000	1.000
2	(Constant)		
	AvgGL_ud	.693	1.443

	R_ud	.693	1.443
3	(Constant)		
	AvgGL_ud	.689	1.451
	R_ud	.573	1.745
	PL_TpudN	.796	1.256
4	(Constant)		
	AvgGL_ud	.462	2.165
	R_ud	.553	1.808
	PL_TpudN	.781	1.281
	Tpaths_ud	.471	2.123

a. Dependent Variable: EVCud\_TSpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Nodes	-.085 <sup>b</sup>	-1.101	.274	-.118	.991	1.009	.991
	Edges_ud	-.075 <sup>b</sup>	-.980	.330	-.105	.994	1.006	.994
	Den_ud	.117 <sup>b</sup>	1.501	.137	.160	.947	1.056	.947
	CC_ud	.198 <sup>b</sup>	2.584	.011	.268	.937	1.067	.937
	GD_ud	.346 <sup>b</sup>	3.316	.001	.337	.485	2.062	.485



	Tpaths_ud	.282 <sup>b</sup>	2.739	.007	.283	.515	1.941	.515
	TSpaths_ud	-.112 <sup>b</sup>	-1.418	.160	-.151	.923	1.083	.923
	AvgPL_ud	.357 <sup>b</sup>	3.401	.001	.344	.475	2.103	.475
	PL_TpudN	-.017 <sup>b</sup>	-.217	.829	-.023	.963	1.039	.963
	PL_TSpud N	.016 <sup>b</sup>	.190	.850	.020	.861	1.162	.861
	S_ud	.180 <sup>b</sup>	2.287	.025	.239	.904	1.106	.904
	R_ud	.396 <sup>b</sup>	4.815	.000	.461	.693	1.443	.693
	SMSP_ud	.198 <sup>b</sup>	2.524	.013	.263	.903	1.107	.903
2	Nodes	.028 <sup>c</sup>	.387	.700	.042	.882	1.134	.617
	Edges_ud	.032 <sup>c</sup>	.442	.659	.048	.895	1.117	.624
	Den_ud	-.074 <sup>c</sup>	-.906	.367	-.098	.702	1.425	.514
	CC_ud	.049 <sup>c</sup>	.603	.548	.065	.729	1.373	.539
	GD_ud	.144 <sup>c</sup>	1.276	.205	.137	.363	2.758	.363
	Tpaths_ud	.174 <sup>c</sup>	1.787	.077	.190	.480	2.083	.471
	TSpaths_ud	.059 <sup>c</sup>	.738	.462	.080	.724	1.381	.527
	AvgPL_ud	.156 <sup>c</sup>	1.368	.175	.147	.355	2.815	.355
	PL_TpudN	-.190 <sup>c</sup>	-2.553	.012	-.267	.796	1.256	.573
	PL_TSpud N	-.064 <sup>c</sup>	-.851	.397	-.092	.820	1.219	.660
	S_ud	-.076 <sup>c</sup>	-.806	.422	-.087	.525	1.905	.402
	SMSP_ud	.042 <sup>c</sup>	.508	.613	.055	.698	1.433	.536
3	Nodes	.012 <sup>d</sup>	.170	.865	.019	.874	1.144	.530

	Edges_ud	.018 <sup>d</sup>	.253	.801	.028	.889	1.125	.534
	Den_ud	-.073 <sup>d</sup>	-.924	.358	-.100	.702	1.425	.445
	CC_ud	.083 <sup>d</sup>	1.050	.297	.114	.710	1.409	.485
	GD_ud	.206 <sup>d</sup>	1.864	.066	.199	.349	2.864	.349
	Tpaths_ud	.212 <sup>d</sup>	2.247	.027	.238	.471	2.123	.462
	TSpaths_ud	.059 <sup>d</sup>	.751	.455	.082	.724	1.381	.468
	AvgPL_ud	.205 <sup>d</sup>	1.848	.068	.198	.347	2.884	.347
	PL_TSpud N	-.038 <sup>d</sup>	-.515	.608	-.056	.803	1.245	.561
	S_ud	-.092 <sup>d</sup>	-.999	.321	-.108	.523	1.913	.349
	SMSP_ud	.081 <sup>d</sup>	1.007	.317	.109	.675	1.482	.485
4	Nodes	-.026 <sup>e</sup>	-.357	.722	-.039	.827	1.209	.445
	Edges_ud	-.021 <sup>e</sup>	-.296	.768	-.032	.836	1.196	.443
	Den_ud	.036 <sup>e</sup>	.383	.703	.042	.479	2.087	.322
	CC_ud	.066 <sup>e</sup>	.847	.400	.093	.702	1.424	.458
	GD_ud	-.038 <sup>e</sup>	-.169	.866	-.019	.083	12.119	.083
	TSpaths_ud	-.025 <sup>e</sup>	-.292	.771	-.032	.572	1.749	.372
	AvgPL_ud	-.080 <sup>e</sup>	-.323	.748	-.035	.069	14.455	.069
	PL_TSpud N	-.044 <sup>e</sup>	-.606	.546	-.066	.802	1.246	.449
	S_ud	.016 <sup>e</sup>	.156	.876	.017	.384	2.603	.268
	SMSP_ud	.048 <sup>e</sup>	.598	.552	.065	.648	1.542	.453

a. Dependent Variable: EVCud\_TSpudN

b. Predictors in the Model: (Constant), AvgGL\_ud

c. Predictors in the Model: (Constant), AvgGL\_ud, R\_ud

d. Predictors in the Model: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN

e. Predictors in the Model: (Constant), AvgGL\_ud, R\_ud, PL\_TpudN, Tpaths\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_ud	R_ud
1	1	1.976	1.000	.01	.01	
	2	.024	9.140	.99	.99	
2	1	2.969	1.000	.00	.00	.00
	2	.026	10.763	.14	.81	.02
	3	.005	24.362	.86	.19	.98
3	1	3.805	1.000	.00	.00	.00
	2	.165	4.806	.01	.02	.00
	3	.026	12.191	.13	.80	.02
	4	.004	29.710	.86	.18	.98
4	1	4.773	1.000	.00	.00	.00
	2	.171	5.282	.00	.01	.00
	3	.036	11.474	.11	.07	.02
	4	.015	17.746	.02	.85	.00
	5	.004	33.495	.87	.07	.98

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions	
		PL_TpudN	Tpaths_ud
1	1		
	2		
2	1		
	2		
	3		
3	1	.01	
	2	.85	
	3	.00	
	4	.14	
4	1	.01	.00
	2	.85	.01
	3	.00	.29
	4	.02	.69
	5	.12	.02

a. Dependent Variable: EVCud\_TSpudN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00909156352 2816	.01134624425 3218	.01098682806 1687	.00035623334 8416
Std. Predicted Value	-5.320	1.009	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00890539586 5440	.01136912778 0199	.01098551004 5693	.00036257667 6851
Residual	- .00112534081 5634	.00095945427 8927	.00000000000 0000	.00026294243 2854
Std. Residual	-4.181	3.565	.000	.977
Stud. Residual	-4.348	3.778	.002	1.024
Deleted Residual	- .00121663312 8934	.00107778341 0437	.00000131801 5994	.00028948625 3543
Stud. Deleted Residual	-4.909	4.123	-.003	1.101
Mahal. Distance	.398	31.256	3.955	4.623
Cook's Distance	.000	.352	.021	.070
Centered Leverage Value	.005	.355	.045	.053

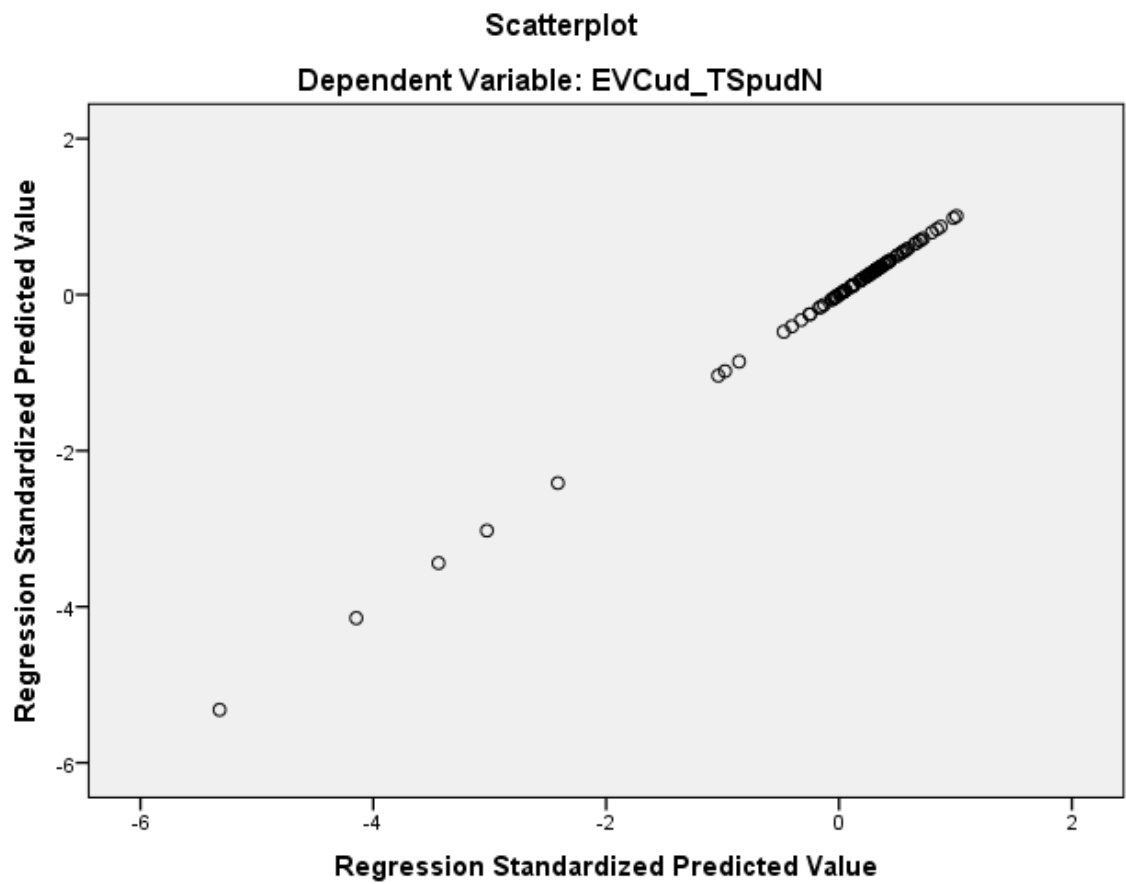
#### Residuals Statistics<sup>a</sup>

	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\_TSpudN

## 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

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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
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	COO_1	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).
---	-----------	--	---

a. Dependent Variable: ECud

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.254 <sup>a</sup>	.064	.054	.00362988439 5996

a. Predictors: (Constant), Tpaths\_ud

b. Dependent Variable: ECud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	6.128	.015 <sup>b</sup>
	Residual	.001	89	.000		

Total	.001	90			
-------	------	----	--	--	--

a. Dependent Variable: ECud

b. Predictors: (Constant), Tpaths\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.014	.001		10.256	.000
Tpaths_ud	-.302	.122	-.254	-2.475	.015

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Tpaths_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	.364 <sup>b</sup>	1.108	.271	.117	.097	10.276
	TSpaths_ud	-.054 <sup>b</sup>	-.480	.632	-.051	.841	1.190
	AvgPL_ud	.398 <sup>b</sup>	1.137	.258	.120	.085	11.708
	AvgGL_ud	.258 <sup>b</sup>	1.565	.121	.165	.381	2.627

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	.097	
	TSpaths_ud	.841	
	AvgPL_ud	.085	
	AvgGL_ud	.381	

a. Dependent Variable: ECud

b. Predictors in the Model: (Constant), Tpaths\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Tpaths_ud

1	1	1.962	1.000	.02	.02
	2	.038	7.197	.98	.98

a. Dependent Variable: ECud

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00759391719 4754	.01246607210 4871	.01098901098 9011	.00094717646 2475
Std. Predicted Value	-3.584	1.559	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00664551882 0733	.01240989286 4525	.01097081989 9149	.00100854176 2139
Residual	- .00904377084 2254	.00539566949 0099	.00000000000 0000	.00360966204 1457
Std. Residual	-2.491	1.486	.000	.994
Stud. Residual	-2.517	1.572	.002	1.006
Deleted Residual	- .00923880375 9217	.00616858061 4030	.00001819108 9862	.00369754535 3885
Stud. Deleted Residual	-2.597	1.585	-.004	1.019
Mahal. Distance	.000	12.848	.989	1.986
Cook's Distance	.000	.222	.012	.030

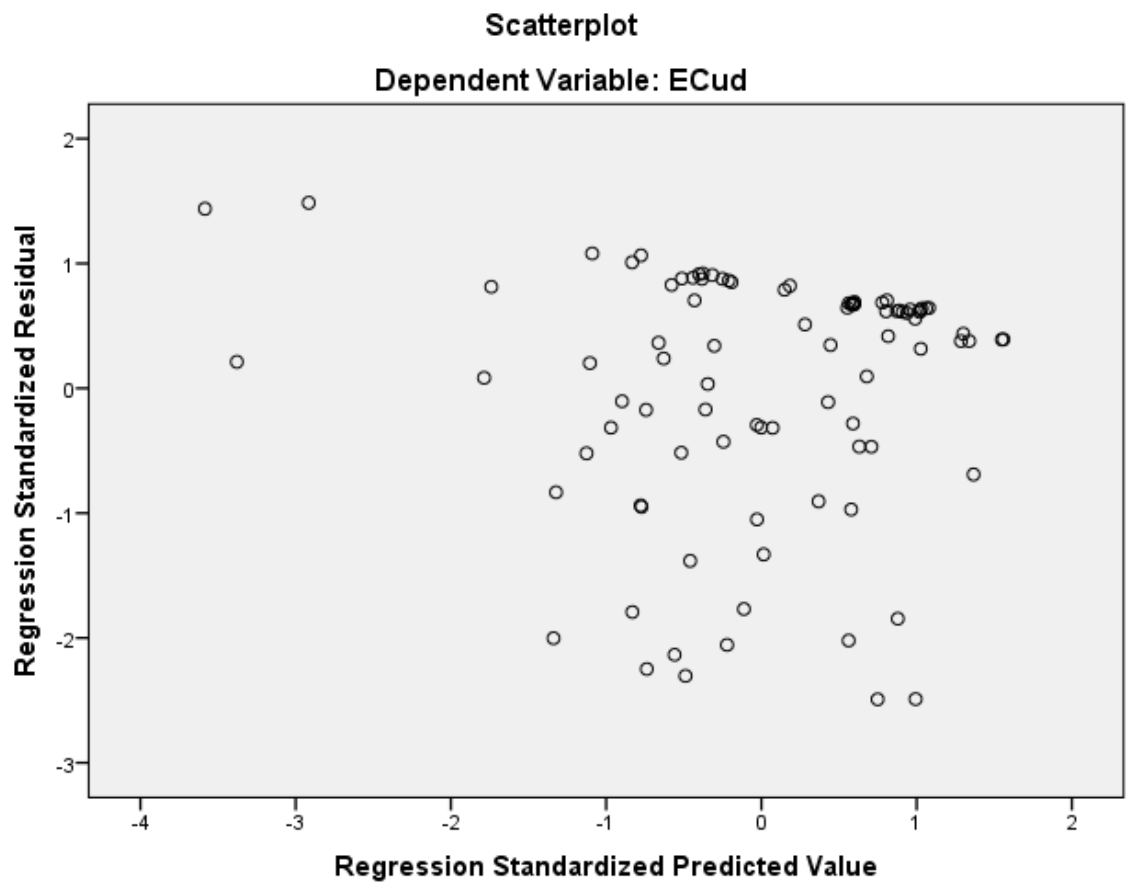
Centered Leverage Value	.000	.143	.011	.022
-------------------------	------	------	------	------

# 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		06-JUN-2015 10:52:44
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_EVCudN
		/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	00:00:00.02
	Memory Required	5920 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 EVCud\_TpudN

/METHOD=STEPWISE GD\_ud Tpaths\_ud TSpats\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	06-JUN-2015 10:52:55	
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 GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.27
	Elapsed Time	00:00:00.26
	Memory Required	5952 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	GD_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
3	TSpats_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCud\_TpudN

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.419 <sup>a</sup>	.176	.167	.00378468907 2017
2	.869 <sup>b</sup>	.754	.749	.00207753585 5601
3	.882 <sup>c</sup>	.778	.771	.00198455979 9456

a. Predictors: (Constant), GD\_ud

b. Predictors: (Constant), GD\_ud, AvgPL\_ud

c. Predictors: (Constant), GD\_ud, AvgPL\_ud, TSpaths\_ud

d. Dependent Variable: EVCud\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	18.997	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			

2	Regression	.001	2	.001	135.203	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.002	90			
3	Regression	.001	3	.000	101.925	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.002	90			

a. Dependent Variable: EVCud\_TpudN

b. Predictors: (Constant), GD\_ud

c. Predictors: (Constant), GD\_ud, AvgPL\_ud

d. Predictors: (Constant), GD\_ud, AvgPL\_ud, TSpats\_ud

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.001		5.499	.000
	GD_ud	.426	.098	.419	4.359	.000
2	(Constant)	.004	.001		5.665	.000
	GD_ud	15.542	1.051	15.284	14.787	.000
	AvgPL_ud	-14.880	1.033	-14.884	-14.400	.000
3	(Constant)	.010	.002		4.776	.000



1	Tpaths_ud	-1.522 <sup>b</sup>	-5.757	.000	-.523	.097	10.276
	TSpaths_ud	-.330 <sup>b</sup>	-3.619	.000	-.360	.981	1.020
	AvgPL_ud	-14.884 <sup>b</sup>	-14.400	.000	-.838	.003	382.907
	AvgGL_ud	-.365 <sup>b</sup>	-2.275	.025	-.236	.344	2.905
2	Tpaths_ud	-.484 <sup>c</sup>	-2.608	.011	-.269	.076	13.179
	TSpaths_ud	-.161 <sup>c</sup>	-3.072	.003	-.313	.928	1.077
	AvgGL_ud	-.099 <sup>c</sup>	-1.075	.285	-.115	.329	3.037
3	Tpaths_ud	.052 <sup>d</sup>	.133	.895	.014	.017	59.006
	AvgGL_ud	-.023 <sup>d</sup>	-.249	.804	-.027	.302	3.311

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_ud	.097
	TSpaths_ud	.981
	AvgPL_ud	.003
	AvgGL_ud	.344
2	Tpaths_ud	.002
	TSpaths_ud	.002
	AvgGL_ud	.002
3	Tpaths_ud	.002
	AvgGL_ud	.002



a. Dependent Variable: EVCud\_TpudN

b. Predictors in the Model: (Constant), GD\_ud

c. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud

d. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud, TSpats\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	GD_ud	AvgPL_ud
1	1	1.938	1.000	.03	.03	
	2	.062	5.599	.97	.97	
2	1	2.916	1.000	.01	.00	.00
	2	.083	5.914	.90	.00	.00
	3	.000	135.482	.09	1.00	1.00
3	1	3.871	1.000	.00	.00	.00
	2	.123	5.619	.02	.00	.00
	3	.006	25.014	.88	.00	.00
	4	.000	160.455	.10	1.00	1.00

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Variance Proportions	
		TSpats_ud	
1	1		

	2	
2	1	
	2	
	3	
3	1	.00
	2	.02
	3	.92
	4	.06

a. Dependent Variable: EVCud\_TpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00136054272 2978	.01855452358 7227	.01098901098 9011	.00365799865 6778
Std. Predicted Value	-2.632	2.068	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00240321317 6876	.01877437718 2126	.01102526890 2724	.00364012777 5568
Residual	- .00542923389 0027	.00484163733 1992	.00000000000 0000	.00195120347 7608
Std. Residual	-2.736	2.440	.000	.983

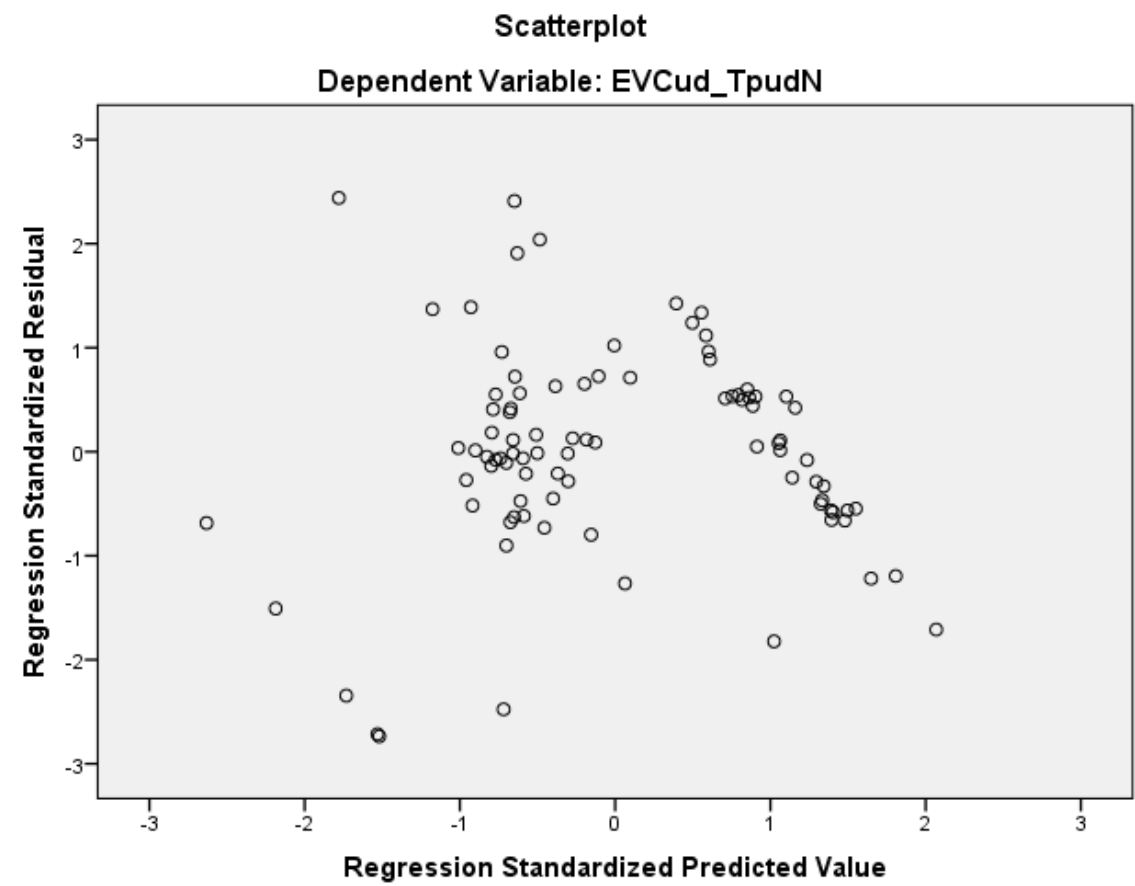
Stud. Residual	-2.811	2.528	-.008	1.012
Deleted Residual	-	.00519899744	-	.00207357957
	.00573168462	5405	.00003625791	2291
	1423		3713	
Stud. Deleted Residual	-2.931	2.611	-.011	1.031
Mahal. Distance	.492	38.059	2.967	4.651
Cook's Distance	.000	.239	.017	.040
Centered Leverage Value	.005	.423	.033	.052

#### 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: 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	06-JUN-2015 10:53:20	
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 GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.20
	Memory Required	6000 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_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCud\_TSpudN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.508 <sup>a</sup>	.259	.250	.00037932631 2809

2	.572 <sup>b</sup>	.327	.312	.00036333511 3043
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a. Predictors: (Constant), AvgGL\_ud

b. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud

c. Dependent Variable: EVCud\_TSpudN

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	31.030	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	21.414	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: EVCud\_TSpudN

b. Predictors: (Constant), AvgGL\_ud

c. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud

#### Coefficients<sup>a</sup>



Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		80.151	.000
	AvgGL_ud	-.072	.013	-.508	-5.570	.000
2	(Constant)	.012	.000		83.507	.000
	AvgGL_ud	-.124	.021	-.877	-5.816	.000
	AvgPL_ud	.048	.016	.453	3.001	.003

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_ud	1.000	1.000
2	(Constant)		
	AvgGL_ud	.336	2.978
	AvgPL_ud	.336	2.978

a. Dependent Variable: EVCud\_TSpudN

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
-------	---------	---	------	---------	-------------------------

					Correlation	Tolerance	VIF
1	GD_ud	.438 <sup>b</sup>	2.935	.004	.299	.344	2.905
	Tpaths_ud	.334 <sup>b</sup>	2.313	.023	.239	.381	2.627
	TSpaths_ud	-.148 <sup>b</sup>	-1.560	.122	-.164	.910	1.099
	AvgPL_ud	.453 <sup>b</sup>	3.001	.003	.305	.336	2.978
2	GD_ud	-.979 <sup>c</sup>	-.564	.574	-.060	.003	390.472
	Tpaths_ud	-.181 <sup>c</sup>	-.603	.548	-.065	.085	11.731
	TSpaths_ud	-.104 <sup>c</sup>	-1.124	.264	-.120	.884	1.131

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.344
	Tpaths_ud	.381
	TSpaths_ud	.910
	AvgPL_ud	.336
2	GD_ud	.002
	Tpaths_ud	.075
	TSpaths_ud	.304

a. Dependent Variable: EVCud\_TSpudN

b. Predictors in the Model: (Constant), AvgGL\_ud

c. Predictors in the Model: (Constant), AvgGL\_ud, AvgPL\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_ud	AvgPL_ud
1	1	1.963	1.000	.02	.02	
	2	.037	7.252	.98	.98	
2	1	2.919	1.000	.01	.00	.00
	2	.066	6.673	.66	.01	.24
	3	.016	13.559	.33	.99	.76

a. Dependent Variable: EVCud\_TSpudN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00980918761 3428	.01130840927 3624	.01098901098 9011	.00025063931 7477
Std. Predicted Value	-4.707	1.274	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00926012825 2208	.01132478378 7131	.01098571254 5003	.00027777076 5871

Residual	- .00138027314 0967	.00131817010 6970	.00000000000 0000	.00035927537 5421
Std. Residual	-3.799	3.628	.000	.989
Stud. Residual	-3.895	4.203	.004	1.045
Deleted Residual	- .00145106599 6662	.00182602298 4460	.00000329844 4008	.00040394974 1277
Stud. Deleted Residual	-4.257	4.674	.002	1.114
Mahal. Distance	.024	26.073	1.978	3.703
Cook's Distance	.000	2.532	.048	.271
Centered Leverage Value	.000	.290	.022	.041

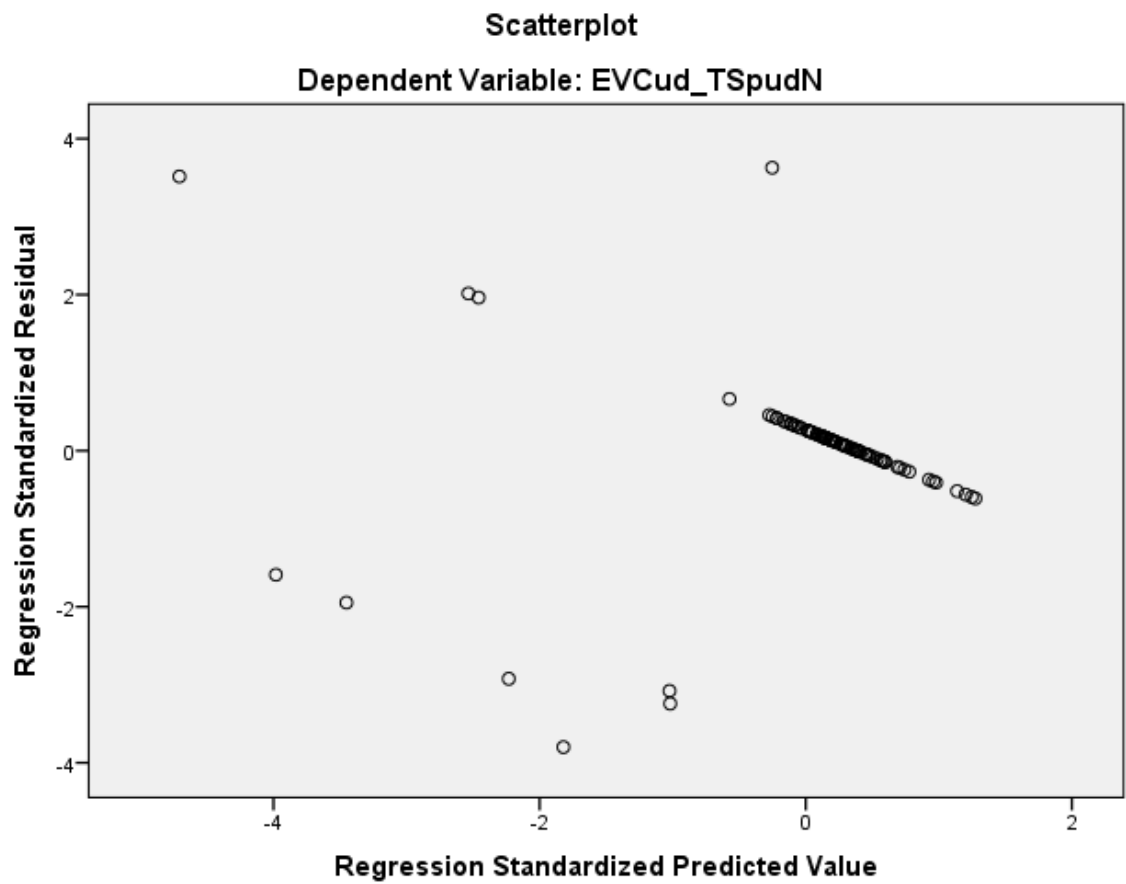
#### Residuals Statistics<sup>a</sup>

	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\_TSpudN

## 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	06-JUN-2015 10:53:53
Comments	
Input	Active Dataset DataSet3

Missing Value Handling	Filter	<none>
	Weight	<none>
	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_TSpudN  /METHOD=STEPWISE GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.19
	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	AvgGL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCud\_TSpudN



**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.619 <sup>a</sup>	.383	.376	.000347799610333
2	.680 <sup>b</sup>	.462	.450	.000326692360815

a. Predictors: (Constant), AvgGL\_ud

b. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud

c. Dependent Variable: EVCud\_TSpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	54.698	.000 <sup>b</sup>
	Residual	.000	88	.000		
	Total	.000	89			
2	Regression	.000	2	.000	37.366	.000 <sup>c</sup>
	Residual	.000	87	.000		
	Total	.000	89			

a. Dependent Variable: EVCud\_TSpudN

b. Predictors: (Constant), AvgGL\_ud

c. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		77.647	.000
	AvgGL_ud	-.104	.014	-.619	-7.396	.000
2	(Constant)	.012	.000		82.499	.000
	AvgGL_ud	-.161	.021	-.959	-7.763	.000
	AvgPL_ud	.051	.014	.441	3.569	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_ud	1.000	1.000
2	(Constant)		
	AvgGL_ud	.405	2.471
	AvgPL_ud	.405	2.471

a. Dependent Variable: EVCud\_TSpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.431 <sup>b</sup>	3.512	.001	.352	.413	2.423
	Tpaths_ud	.357 <sup>b</sup>	2.959	.004	.302	.442	2.264
	TSpaths_ud	-.100 <sup>b</sup>	-1.138	.258	-.121	.897	1.115
	AvgPL_ud	.441 <sup>b</sup>	3.569	.001	.357	.405	2.471
2	GD_ud	-.603 <sup>c</sup>	-.423	.673	-.046	.003	325.383
	Tpaths_ud	-.066 <sup>c</sup>	-.261	.794	-.028	.099	10.116
	TSpaths_ud	-.049 <sup>c</sup>	-.581	.563	-.063	.868	1.152

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	.413	
	Tpaths_ud	.442	
	TSpaths_ud	.897	
	AvgPL_ud	.405	
2	GD_ud	.003	

Tpaths_ud	.091
TSpaths_ud	.359

a. Dependent Variable: EVCud\_TSpudN

b. Predictors in the Model: (Constant), AvgGL\_ud

c. Predictors in the Model: (Constant), AvgGL\_ud, AvgPL\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgGL_ud	AvgPL_ud
1	1	1.972	1.000	.01	.01	
	2	.028	8.388	.99	.99	
2	1	2.929	1.000	.01	.00	.00
	2	.056	7.225	.53	.00	.36
	3	.015	14.077	.47	1.00	.64

a. Dependent Variable: EVCud\_TSpudN

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	.00956336408 8535	.01135264616 4596	.01098793165 2723	.00029936317 0498
Std. Predicted Value	-4.759	1.218	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00961901247 5014	.01136257126 9274	.01098765480 1177	.00030487014 9555
Residual	- .00117458996 8286	.00132165849 2088	.00000000000 0000	.00032300080 3204
Std. Residual	-3.595	4.046	.000	.989
Stud. Residual	-3.722	4.093	.000	1.030
Deleted Residual	- .00125884439 3305	.00138277397 4910	.00000027685 1546	.00035125934 5607
Stud. Deleted Residual	-4.036	4.529	.001	1.099
Mahal. Distance	.051	23.107	1.978	3.658
Cook's Distance	.000	1.242	.032	.144
Centered Leverage Value	.001	.260	.022	.041

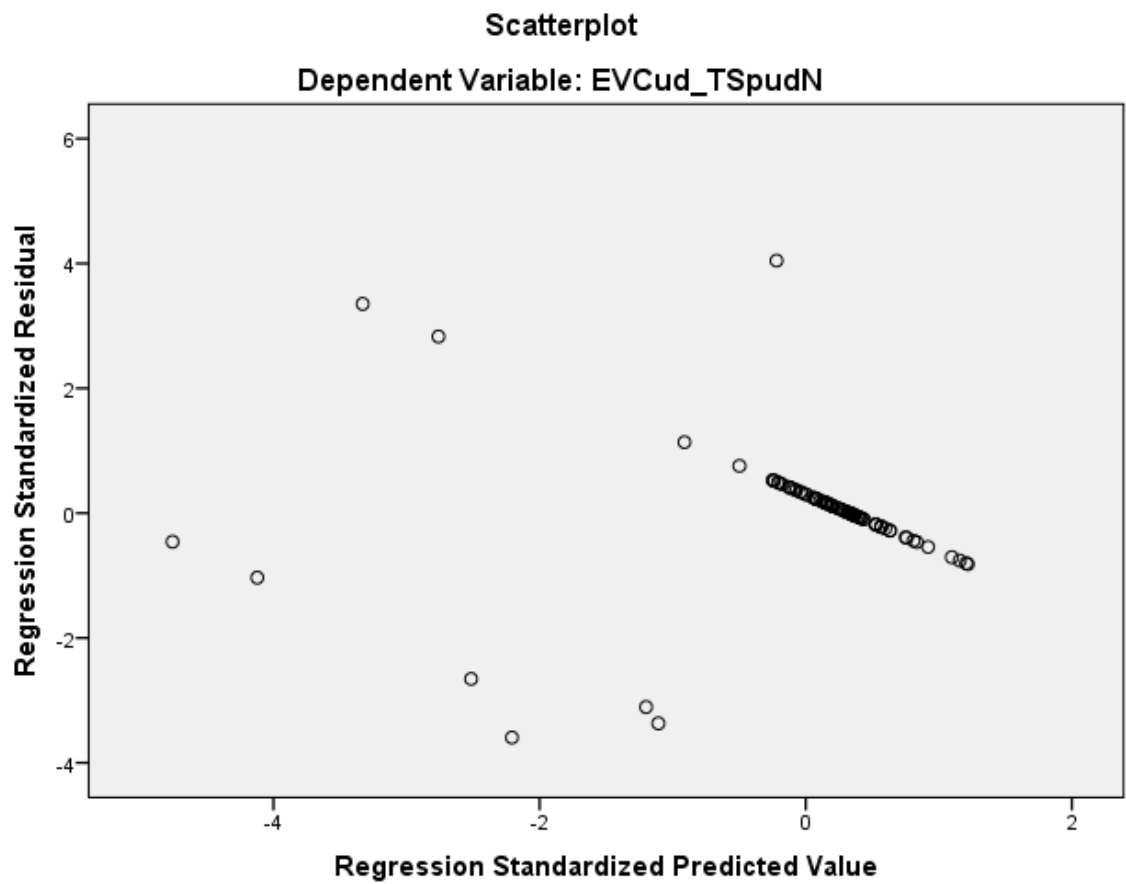
#### Residuals Statistics<sup>a</sup>

	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\_TSpudN

## 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		06-JUN-2015 10:54:50
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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_TSpudN  /METHOD=STEPWISE GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.21
	Memory Required	6080 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			Stepwise (Criteria: Probability-of- F-to-enter <=
	AvgGL_ud	.	.050, Probability-of- F-to-remove >= .100).
2			Stepwise (Criteria: Probability-of- F-to-enter <=
	AvgPL_ud	.	.050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: EVCud\_TSpudN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.699 <sup>a</sup>	.489	.483	.00031833520 0289
2	.741 <sup>b</sup>	.550	.539	.00030060192 1113

a. Predictors: (Constant), AvgGL\_ud

b. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud

c. Dependent Variable: EVCud\_TSpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	83.239	.000 <sup>b</sup>
	Residual	.000	87	.000		
	Total	.000	88			
2	Regression	.000	2	.000	52.459	.000 <sup>c</sup>
	Residual	.000	86	.000		
	Total	.000	88			

a. Dependent Variable: EVCud\_TSpudN

b. Predictors: (Constant), AvgGL\_ud

c. Predictors: (Constant), AvgGL\_ud, AvgPL\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		79.313	.000

	AvgGL_ud	-.130	.014	-.699	-9.124	.000
2	(Constant)	.012	.000		84.035	.000
	AvgGL_ud	-.178	.020	-.958	-9.125	.000
	AvgPL_ud	.045	.013	.357	3.401	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgGL_ud	1.000	1.000
2	(Constant)		
	AvgGL_ud	.475	2.103
	AvgPL_ud	.475	2.103

a. Dependent Variable: EVCud\_TSpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.346 <sup>b</sup>	3.316	.001	.337	.485	2.062
	Tpaths_ud	.282 <sup>b</sup>	2.739	.007	.283	.515	1.941
	TSpaths_ud	-.112 <sup>b</sup>	-1.418	.160	-.151	.923	1.083

	AvgPL_ud	.357 <sup>b</sup>	3.401	.001	.344	.475	2.103
2	GD_ud	-.864 <sup>c</sup>	-.719	.474	-.078	.004	274.313
	Tpaths_ud	-.086 <sup>c</sup>	-.404	.687	-.044	.117	8.571
	TSpaths_ud	-.068 <sup>c</sup>	-.881	.381	-.095	.892	1.121

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.485
	Tpaths_ud	.515
	TSpaths_ud	.923
	AvgPL_ud	.475
2	GD_ud	.004
	Tpaths_ud	.108
	TSpaths_ud	.427

a. Dependent Variable: EVCud\_TSpudN

b. Predictors in the Model: (Constant), AvgGL\_ud

c. Predictors in the Model: (Constant), AvgGL\_ud, AvgPL\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	AvgGL_ud	AvgPL_ud
1	1	1.976	1.000	.01	.01	
	2	.024	9.140	.99	.99	
2	1	2.936	1.000	.01	.00	.01
	2	.049	7.706	.47	.00	.46
	3	.015	14.098	.52	1.00	.53

a. Dependent Variable: EVCud\_TSpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00927499495 4467	.01136679388 5827	.01098682806 1687	.00032822717 3368
Std. Predicted Value	-5.215	1.158	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00920812040 5674	.01137728616 5953	.01098744258 2907	.00033172808 6446
Residual	- .00106714258 4361	.00130855245 5157	.00000000000 0000	.00029716635 7755
Std. Residual	-3.550	4.353	.000	.989
Stud. Residual	-3.617	4.405	-.001	1.018

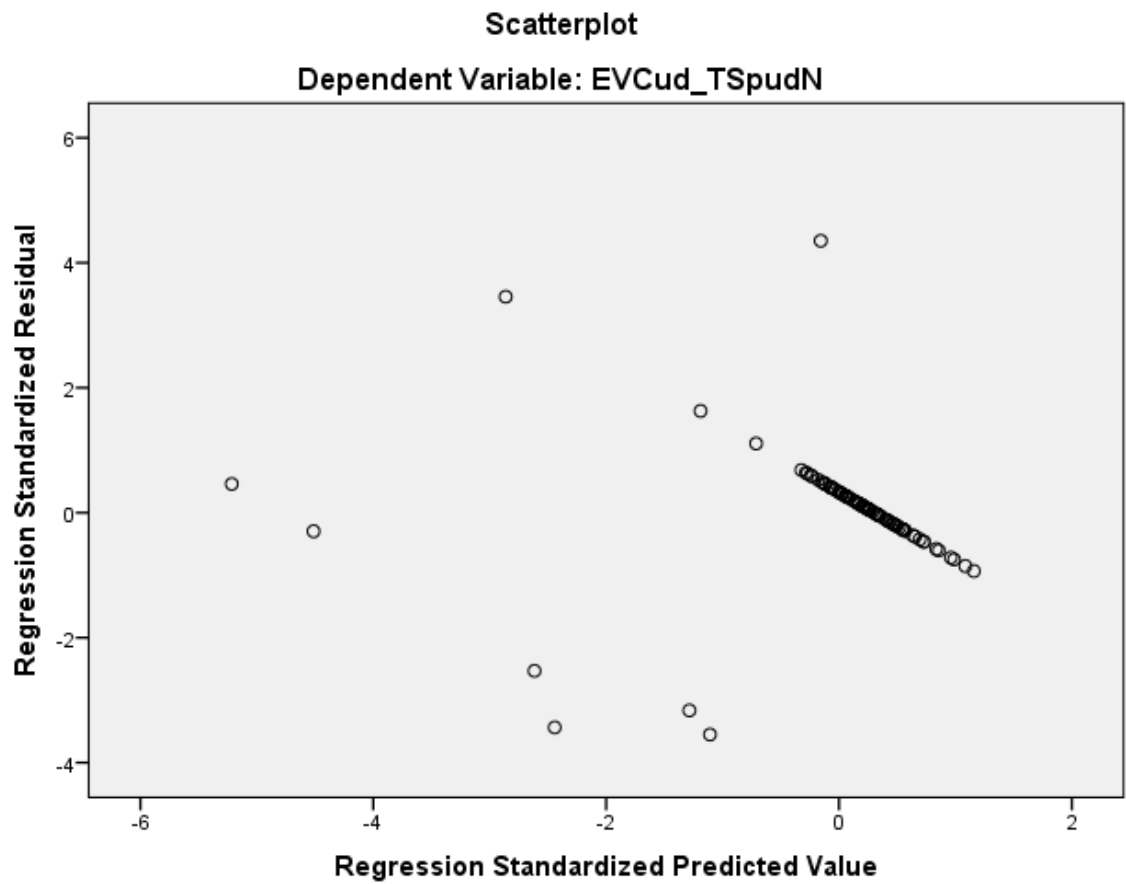
Deleted Residual	- .00112310389 5225	.00133966153 9532	- .00000061452 1220	.00031559260 3980
Stud. Deleted Residual	-3.906	4.976	-.001	1.092
Mahal. Distance	.082	27.669	1.978	3.856
Cook's Distance	.000	.611	.022	.083
Centered Leverage Value	.001	.314	.022	.044

**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\_TSpudN

## 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

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Comments			
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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_TpudN  /METHOD=STEPWISE GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.21
	Memory Required	6080 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	GD_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgPL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_TpudN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.306 <sup>a</sup>	.094	.083	.00571532492 2408
2	.466 <sup>b</sup>	.217	.199	.00534293068 8017

- a. Predictors: (Constant), GD\_ud
- b. Predictors: (Constant), GD\_ud, AvgPL\_ud
- c. Dependent Variable: PL\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	9.186	.003 <sup>b</sup>
	Residual	.003	89	.000		
	Total	.003	90			
2	Regression	.001	2	.000	12.175	.000 <sup>c</sup>
	Residual	.003	88	.000		
	Total	.003	90			

- a. Dependent Variable: PL\_TpudN
- b. Predictors: (Constant), GD\_ud
- c. Predictors: (Constant), GD\_ud, AvgPL\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.006	.002		3.506	.001
	GD_ud	.448	.148	.306	3.031	.003
2	(Constant)	.004	.002		2.581	.012
	GD_ud	10.490	2.703	7.165	3.881	.000
	AvgPL_ud	-9.886	2.657	-6.868	-3.720	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	GD_ud	1.000	1.000
2	(Constant)		
	GD_ud	.003	382.907
	AvgPL_ud	.003	382.907

a. Dependent Variable: PL\_TpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	Tpaths_ud	-.536 <sup>b</sup>	-1.674	.098	-.176	.097	10.276

	TSpaths_ud	-.174 <sup>b</sup>	-1.726	.088	-.181	.981	1.020
	AvgPL_ud	-6.868 <sup>b</sup>	-3.720	.000	-.369	.003	382.907
	AvgGL_ud	-.362 <sup>b</sup>	-2.145	.035	-.223	.344	2.905
2	Tpaths_ud	-.010 <sup>c</sup>	-.030	.976	-.003	.076	13.179
	TSpaths_ud	-.097 <sup>c</sup>	-.992	.324	-.106	.928	1.077
	AvgGL_ud	-.248 <sup>c</sup>	-1.519	.132	-.161	.329	3.037

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	Tpaths_ud	.097
	TSpaths_ud	.981
	AvgPL_ud	.003
	AvgGL_ud	.344
2	Tpaths_ud	.002
	TSpaths_ud	.002
	AvgGL_ud	.002

a. Dependent Variable: PL\_TpudN

b. Predictors in the Model: (Constant), GD\_ud

c. Predictors in the Model: (Constant), GD\_ud, AvgPL\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	GD_ud	AvgPL_ud
1	1	1.938	1.000	.03	.03	
	2	.062	5.599	.97	.97	
2	1	2.916	1.000	.01	.00	.00
	2	.083	5.914	.90	.00	.00
	3	.000	135.482	.09	1.00	1.00

a. Dependent Variable: PL\_TpudN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00590949645 2659	.01781727559 8645	.01098901098 9011	.00277909052 7048
Std. Predicted Value	-1.828	2.457	.000	1.000
Standard Error of Predicted Value	.001	.002	.001	.000
Adjusted Predicted Value	.00624790647 9985	.01868149451 9114	.01104401394 9086	.00284011153 3242
Residual	- .00941998884 0818	.01696614548 5640	.00000000000 0000	.00528323126 4684
Std. Residual	-1.763	3.175	.000	.989

Stud. Residual	-1.780	3.204	-.005	1.007
Deleted Residual	-	.01727551035	-	.00547846415
	.01029819529	5830	.00005500296	0105
	5036		0075	
Stud. Deleted Residual	-1.803	3.390	.003	1.033
Mahal. Distance	.385	15.979	1.978	2.278
Cook's Distance	.000	.233	.013	.029
Centered Leverage Value	.004	.178	.022	.025

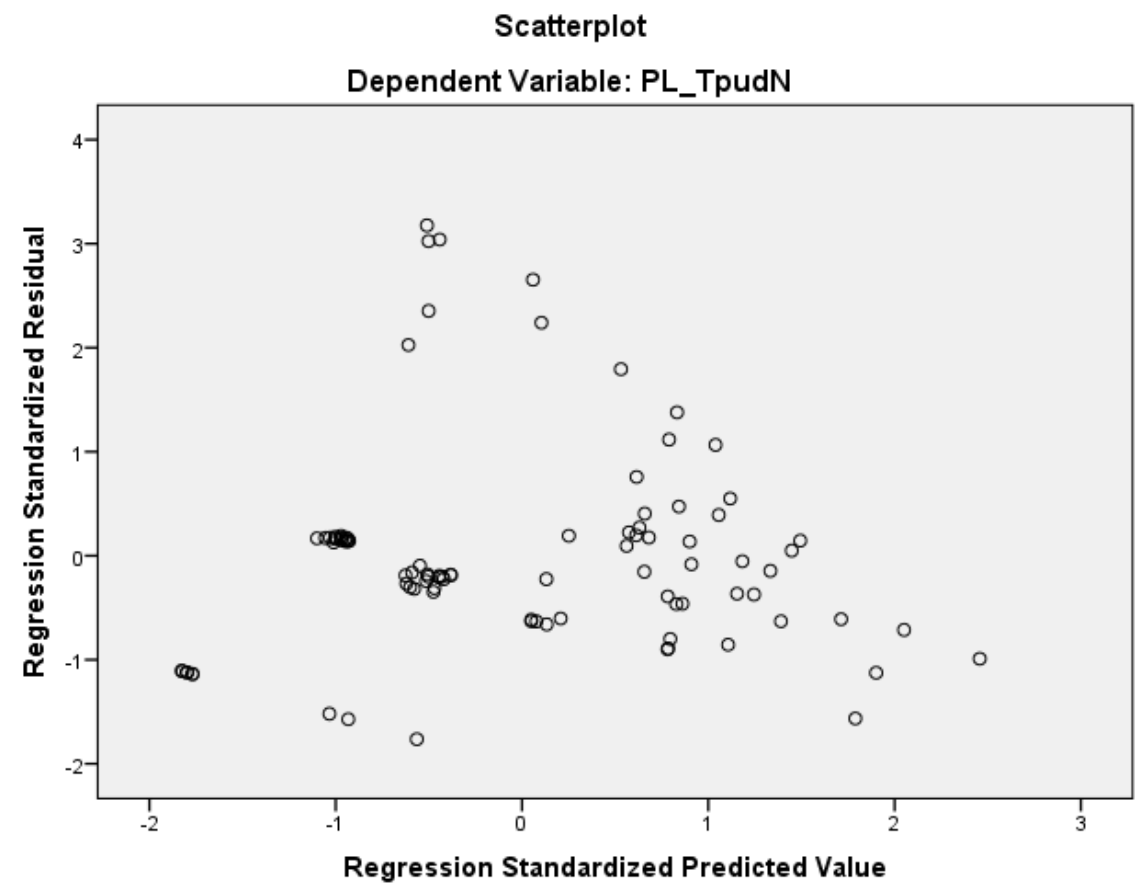
#### Residuals Statistics<sup>a</sup>

	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



/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		06-JUN-2015 10:45:28
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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_TSpudN  /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	00:00:00.20
	Memory Required	6112 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_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: PL\_TSpudN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.395 <sup>a</sup>	.156	.146	.01067861667 5879

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	.002	1	.002	16.424	.000 <sup>b</sup>
	Residual	.010	89	.000		
	Total	.012	90			

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)	-.005	.004		-1.245	.216
	AvgGL_ud	1.469	.362	.395	4.053	.000

**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	.140 <sup>b</sup>	.844	.401	.090	.344	2.905
	Tpaths_ud	.176 <sup>b</sup>	1.119	.266	.118	.381	2.627
	TSpaths_ud	.037 <sup>b</sup>	.361	.719	.039	.910	1.099
	AvgPL_ud	.158 <sup>b</sup>	.942	.349	.100	.336	2.978

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.344
	Tpaths_ud	.381
	TSpaths_ud	.910
	AvgPL_ud	.336

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	1.963	1.000	.02	.02
	2	.037	7.252	.98	.98

a. Dependent Variable: PL\_TSpudN

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00649959687 1436	.03421057388 1865	.01098901098 9011	.00456181790 5420
Std. Predicted Value	-.984	5.090	.000	1.000
Standard Error of Predicted Value	.001	.006	.001	.001
Adjusted Predicted Value	.00664410740 1371	.03960655257 1058	.01107130243 3110	.00494956248 1300
Residual	- .01867579482 4958	.02475949376 8215	.00000000000 0000	.01061912531 2285
Std. Residual	-1.749	2.319	.000	.994
Stud. Residual	-1.787	2.334	-.004	1.006
Deleted Residual	- .01950549893 0812	.02509343437 8505	- .00008229144 4099	.01088738147 2235

Stud. Deleted Residual	-1.810	2.396	-.001	1.011
Mahal. Distance	.000	25.912	.989	3.478
Cook's Distance	.000	.427	.013	.046
Centered Leverage Value	.000	.288	.011	.039

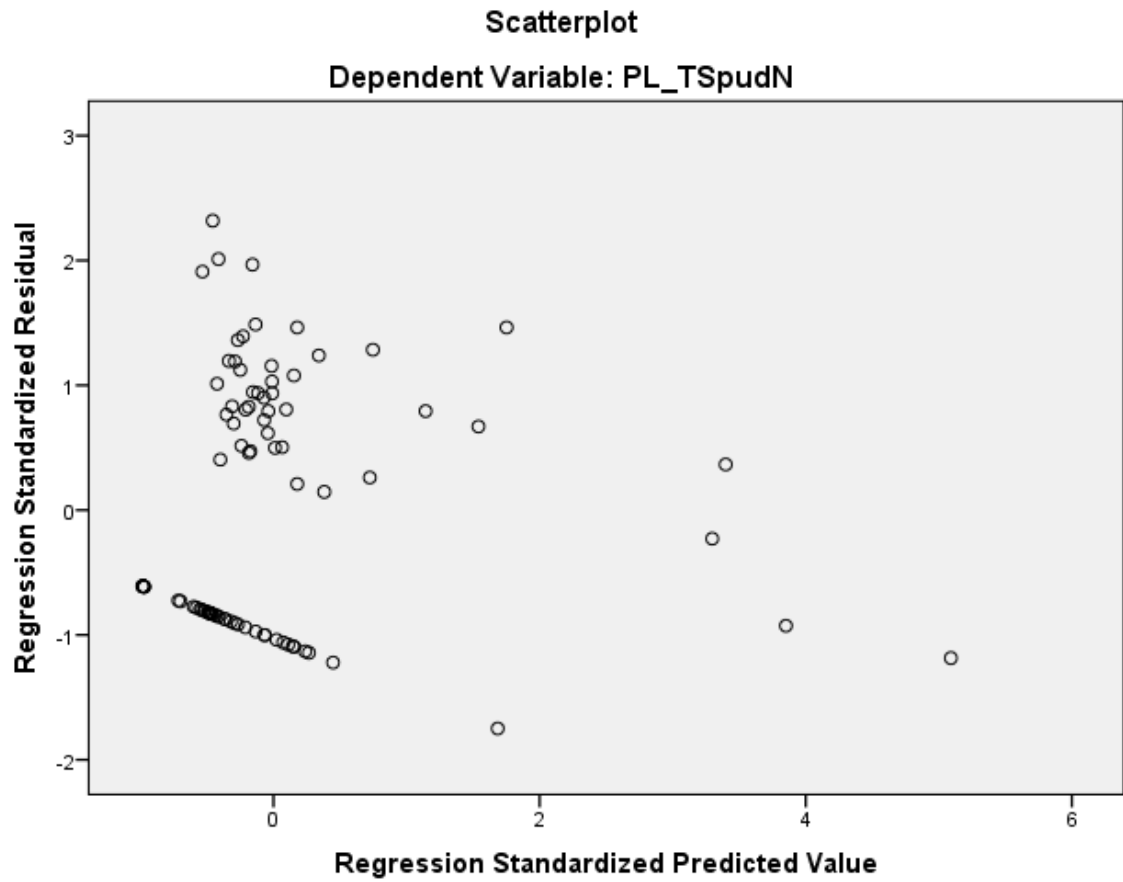
**Residuals Statistics<sup>a</sup>**

	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: 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 TSpats\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	06-JUN-2015 10:45:54	
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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 S_ud  /METHOD=STEPWISE GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time		00:00:00.22
	Elapsed Time		00:00:00.23
	Memory Required		6160 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_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	AvgGL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.468 <sup>a</sup>	.219	.210	.00410813730 4027
2	.627 <sup>b</sup>	.393	.380	.00364037290 6979

a. Predictors: (Constant), TSpaths\_ud

b. Predictors: (Constant), TSpaths\_ud, AvgGL\_ud

c. Dependent Variable: S\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	24.910	.000 <sup>b</sup>
	Residual	.002	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	28.532	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

a. Dependent Variable: S\_ud

b. Predictors: (Constant), TSpaths\_ud

c. Predictors: (Constant), TSpaths\_ud, AvgGL\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.030	.004		7.791	.000
	TSpaths_ud	-1.752	.351	-.468	-4.991	.000
2	(Constant)	.028	.003		8.239	.000
	TSpaths_ud	-2.244	.326	-.599	-6.882	.000
	AvgGL_ud	.652	.129	.438	5.034	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_ud	1.000	1.000
2	(Constant)		
	TSpaths_ud	.910	1.099
	AvgGL_ud	.910	1.099

a. Dependent Variable: S\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.368 <sup>b</sup>	4.250	.000	.413	.981	1.020

	Tpaths_ud	.321 <sup>b</sup>	3.314	.001	.333	.841	1.190
	AvgPL_ud	.372 <sup>b</sup>	4.299	.000	.417	.977	1.023
	AvgGL_ud	.438 <sup>b</sup>	5.034	.000	.473	.910	1.099
2	GD_ud	.074 <sup>c</sup>	.514	.608	.055	.332	3.008
	Tpaths_ud	-.064 <sup>c</sup>	-.453	.652	-.048	.351	2.846
	AvgPL_ud	.082 <sup>c</sup>	.562	.575	.060	.326	3.066

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.981
	Tpaths_ud	.841
	AvgPL_ud	.977
	AvgGL_ud	.910
2	GD_ud	.309
	Tpaths_ud	.351
	AvgPL_ud	.304

a. Dependent Variable: S\_ud

b. Predictors in the Model: (Constant), TSpats\_ud

c. Predictors in the Model: (Constant), TSpats\_ud, AvgGL\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpaths_ud	AvgGL_ud
1	1	1.994	1.000	.00	.00	
	2	.006	17.970	1.00	1.00	
2	1	2.948	1.000	.00	.00	.01
	2	.046	8.034	.05	.03	.98
	3	.006	21.994	.95	.96	.01

a. Dependent Variable: S\_ud

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	- .00646133814 0070	.01986044086 5159	.01098901098 9011	.00289870485 7181
Std. Predicted Value	-6.020	3.060	.000	1.000
Standard Error of Predicted Value	.000	.002	.001	.000
Adjusted Predicted Value	- .01173260156 0652	.02373741753 3994	.01097139919 7366	.00342206676 1855
Residual	- .00857815425 8430	.01532317511 7373	.00000000000 0000	.00359969707 2694



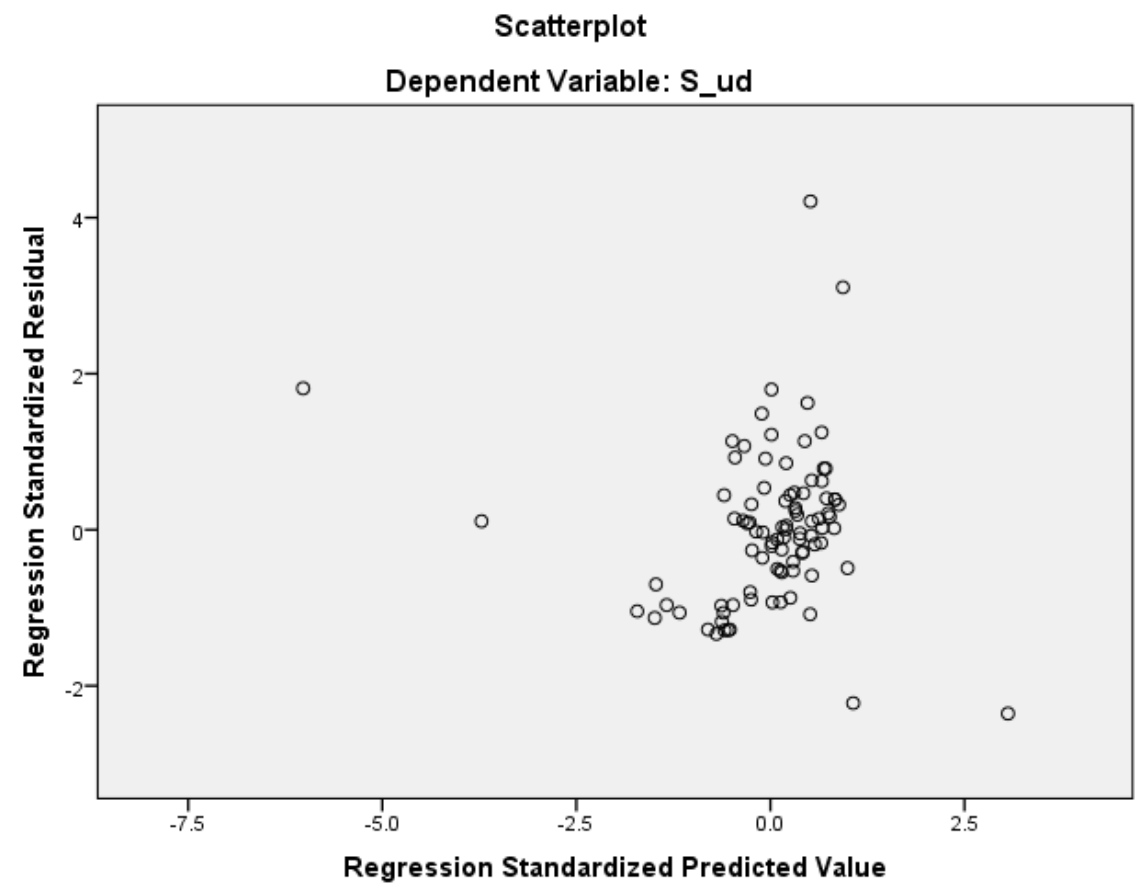
Std. Residual	-2.356	4.209	.000	.989
Stud. Residual	-2.839	4.542	.002	1.045
Deleted Residual	-			
	.01245513092	.01784450933	.00001761179	.00407339001
	7265	3372	1645	5978
Stud. Deleted Residual	-2.962	5.162	.009	1.091
Mahal. Distance	.013	38.986	1.978	5.518
Cook's Distance	.000	1.574	.053	.240
Centered Leverage Value	.000	.433	.022	.061

#### 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 TSpats\_ud AvgPL\_ud AvgGL\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created		06-JUN-2015 10:46:22
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 R_ud  /METHOD=STEPWISE GD_ud Tpaths_ud TSpaths_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.23
	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	AvgPL_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).

a. Dependent Variable: R\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.693 <sup>a</sup>	.480	.474	.00088755588 4869

2	.754 <sup>b</sup>	.569	.559	.00081311608 7016
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a. Predictors: (Constant), AvgPL\_ud

b. Predictors: (Constant), AvgPL\_ud, Tpaths\_ud

c. Dependent Variable: R\_ud

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	82.245	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	58.017	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			

a. Dependent Variable: R\_ud

b. Predictors: (Constant), AvgPL\_ud

c. Predictors: (Constant), AvgPL\_ud, Tpaths\_ud

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.009	.000		33.010	.000
	AvgPL_ud	.205	.023	.693	9.069	.000
2	(Constant)	.010	.000		26.547	.000
	AvgPL_ud	.492	.071	1.666	6.955	.000
	Tpaths_ud	-.398	.094	-1.017	-4.248	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_ud	1.000	1.000
2	(Constant)		
	AvgPL_ud	.085	11.708
	Tpaths_ud	.085	11.708

a. Dependent Variable: R\_ud

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
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					Correlation	Tolerance	VIF
1	GD_ud	.222 <sup>b</sup>	.147	.883	.016	.003	382.907
	Tpaths_ud	-1.017 <sup>b</sup>	-4.248	.000	-.412	.085	11.708
	TSpaths_ud	-.278 <sup>b</sup>	-3.868	.000	-.381	.977	1.023
	AvgGL_ud	-.002 <sup>b</sup>	-.015	.988	-.002	.336	2.978
2	GD_ud	-1.940 <sup>c</sup>	-1.340	.184	-.142	.002	431.049
	TSpaths_ud	-.055 <sup>c</sup>	-.359	.720	-.039	.213	4.696
	AvgGL_ud	.021 <sup>c</sup>	.172	.864	.018	.335	2.984

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.003
	Tpaths_ud	.085
	TSpaths_ud	.977
	AvgGL_ud	.336
2	GD_ud	.002
	TSpaths_ud	.019
	AvgGL_ud	.075

a. Dependent Variable: R\_ud

b. Predictors in the Model: (Constant), AvgPL\_ud

c. Predictors in the Model: (Constant), AvgPL\_ud, Tpaths\_ud



### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	AvgPL_ud	Tpaths_ud
1	1	1.936	1.000	.03	.03	
	2	.064	5.510	.97	.97	
2	1	2.927	1.000	.01	.00	.00
	2	.069	6.524	.48	.05	.00
	3	.004	27.417	.52	.95	.99

a. Dependent Variable: R\_ud

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00785148888 8264	.01451252680 2719	.01098901098 9011	.00092326178 4404
Std. Predicted Value	-3.398	3.816	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00783203076 5712	.01486413273 9604	.01099733345 3761	.00093538308 2616

Residual	- .00214770366 4377	.00136604509 3164	.00000000000 0000	.00080403070 5915
Std. Residual	-2.641	1.680	.000	.989
Stud. Residual	-2.679	1.695	-.005	1.008
Deleted Residual	- .00220973067 9169	.00139084761 0310	- .00000832246 4750	.00083571541 9583
Stud. Deleted Residual	-2.780	1.714	-.010	1.020
Mahal. Distance	.040	24.398	1.978	3.480
Cook's Distance	.000	.337	.014	.038
Centered Leverage Value	.000	.271	.022	.039

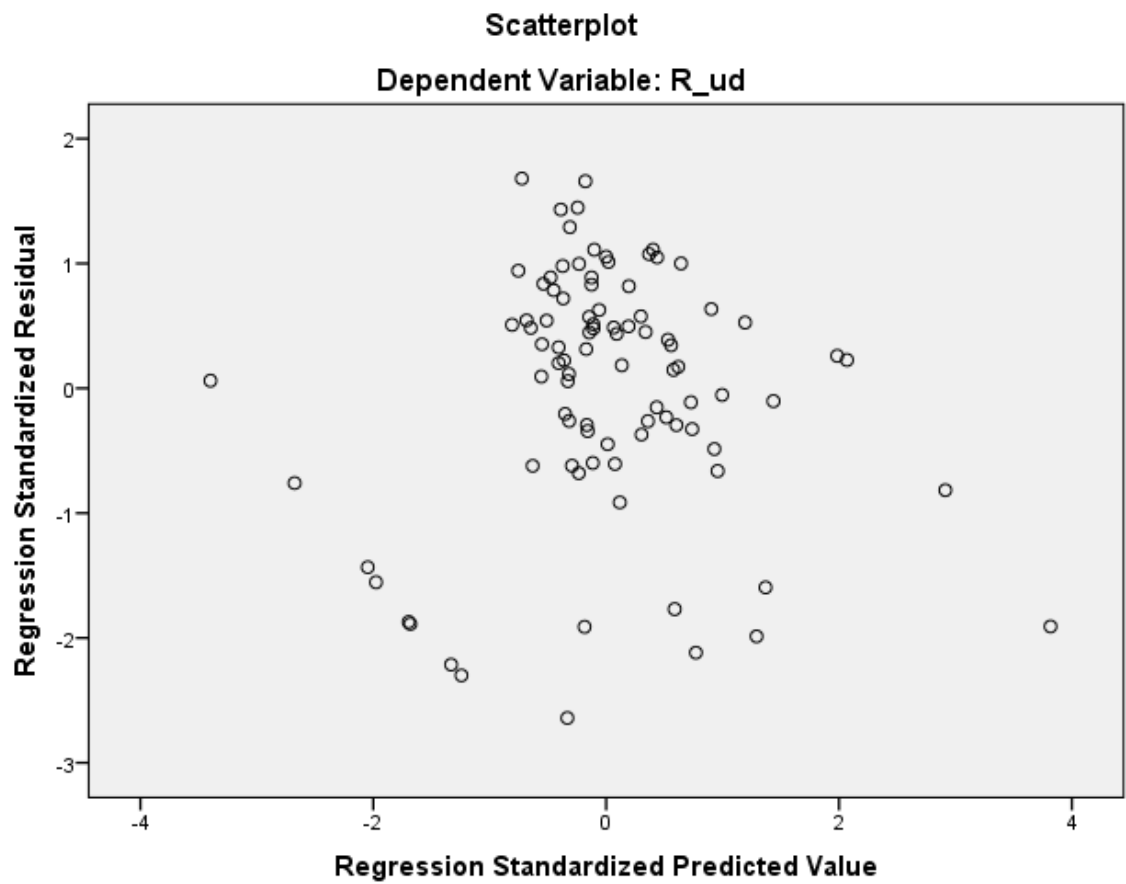
#### Residuals Statistics<sup>a</sup>

	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: 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	06-JUN-2015 10:46:48
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 SMSP_ud  /METHOD=STEPWISE GD_ud Tpaths_ud TSpats_ud AvgPL_ud AvgGL_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.23
	Elapsed Time	00:00:00.22
	Memory Required	6240 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	AvgPL_ud	.	Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: SMSP\_ud

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.361 <sup>a</sup>	.130	.120	.01313654281 8511

a. Predictors: (Constant), AvgPL\_ud

b. Dependent Variable: SMSP\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	13.327	.000 <sup>b</sup>
	Residual	.015	89	.000		
	Total	.018	90			

a. Dependent Variable: SMSP\_ud

b. Predictors: (Constant), AvgPL\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.002	.004		-.614	.541
	AvgPL_ud	1.219	.334	.361	3.651	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AvgPL_ud	1.000	1.000

a. Dependent Variable: SMSP\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.111 <sup>b</sup>	.057	.954	.006	.003	382.907
	Tpaths_ud	.089 <sup>b</sup>	.263	.793	.028	.085	11.708
	TSpaths_ud	.043 <sup>b</sup>	.426	.671	.045	.977	1.023
	AvgGL_ud	-.232 <sup>b</sup>	-1.366	.175	-.144	.336	2.978

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	.003	
	Tpaths_ud	.085	
	TSpaths_ud	.977	



AvgGL_ud	.336
----------	------

a. Dependent Variable: SMSP\_ud

b. Predictors in the Model: (Constant), AvgPL\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	AvgPL_ud
1	1	1.936	1.000	.03	.03
	2	.064	5.510	.97	.97

a. Dependent Variable: SMSP\_ud

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00232714461 1627	.03078665770 5903	.01098901098 9011	.00505499097 9159
Std. Predicted Value	-1.714	3.916	.000	1.000
Standard Error of Predicted Value	.001	.006	.002	.001
Adjusted Predicted Value	.00243054190 6506	.03691056743 2642	.01106030709 1472	.00537823087 4774

Residual	- .02763186022 6393	.04561581090 0927	.00000000000 0000	.01306335816 6519
Std. Residual	-2.103	3.472	.000	.994
Stud. Residual	-2.325	3.575	-.003	1.011
Deleted Residual	- .03375576809 0487	.04835420101 8810	- .00007129610 2461	.01352228921 3872
Stud. Deleted Residual	-2.385	3.842	.006	1.037
Mahal. Distance	.022	15.339	.989	2.155
Cook's Distance	.000	.599	.018	.074
Centered Leverage Value	.000	.170	.011	.024

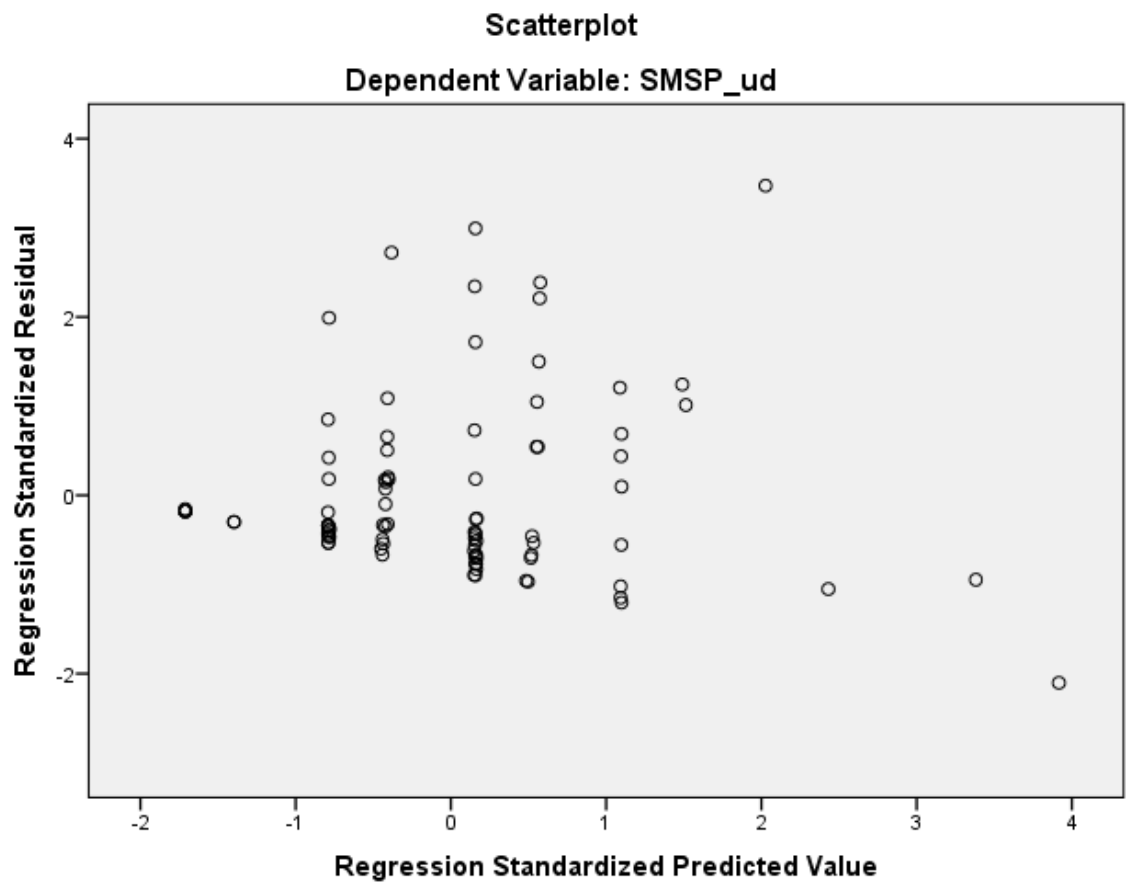
#### Residuals Statistics<sup>a</sup>

	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: SMSP\_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

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Comments		
Input	Active Dataset	DataSet2

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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	88
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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	00:00:00.25
	Elapsed Time	00:00:00.24
	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).
2	AvgGL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.578 <sup>a</sup>	.334	.326	.00343212397 4088
2	.723 <sup>b</sup>	.523	.512	.00292246978 1241

a. Predictors: (Constant), TSpaths\_ud

b. Predictors: (Constant), TSpaths\_ud, AvgGL\_ud

c. Dependent Variable: S\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	43.145	.000 <sup>b</sup>
	Residual	.001	86	.000		
	Total	.002	87			
2	Regression	.001	2	.000	46.558	.000 <sup>c</sup>
	Residual	.001	85	.000		
	Total	.002	87			

a. Dependent Variable: S\_ud

b. Predictors: (Constant), TSpats\_ud

c. Predictors: (Constant), TSpats\_ud, AvgGL\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.038	.004		9.189	.000
	TSpats_ud	-2.482	.378	-.578	-6.568	.000
2	(Constant)	.039	.004		10.989	.000
	TSpats_ud	-3.378	.357	-.787	-9.464	.000
	AvgGL_ud	.842	.145	.482	5.797	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpats_ud	1.000	1.000
2	(Constant)		
	TSpats_ud	.812	1.231
	AvgGL_ud	.812	1.231



a. Dependent Variable: S\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.399 <sup>b</sup>	4.919	.000	.471	.928	1.077
	Tpaths_ud	.391 <sup>b</sup>	4.193	.000	.414	.746	1.341
	AvgPL_ud	.406 <sup>b</sup>	5.008	.000	.477	.922	1.085
	AvgGL_ud	.482 <sup>b</sup>	5.797	.000	.532	.812	1.231
2	GD_ud	.147 <sup>c</sup>	1.290	.200	.139	.429	2.332
	Tpaths_ud	.093 <sup>c</sup>	.785	.434	.085	.403	2.480
	AvgPL_ud	.159 <sup>c</sup>	1.385	.170	.149	.423	2.364

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	GD_ud	.928	
	Tpaths_ud	.746	
	AvgPL_ud	.922	
	AvgGL_ud	.812	
2	GD_ud	.375	

Tpaths_ud	.403
AvgPL_ud	.373

a. Dependent Variable: S\_ud

b. Predictors in the Model: (Constant), TSpats\_ud

c. Predictors in the Model: (Constant), TSpats\_ud, AvgGL\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TSpats_ud	AvgGL_ud
1	1	1.996	1.000	.00	.00	
	2	.004	22.508	1.00	1.00	
2	1	2.969	1.000	.00	.00	.00
	2	.028	10.370	.07	.02	.91
	3	.004	28.497	.93	.97	.08

a. Dependent Variable: S\_ud

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
--	---------	---------	------	----------------

Predicted Value	- .00506057078 0188	.01486302912 2353	.01091791041 3364	.00302345032 4891
Std. Predicted Value	-5.285	1.305	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	- .00788088981 0622	.01725391671 0615	.01092761217 5422	.00324330600 8051
Residual	- .00776042835 7869	.01066406723 1119	.00000000000 0000	.00288868286 7920
Std. Residual	-2.655	3.649	.000	.988
Stud. Residual	-3.200	3.741	-.002	1.029
Deleted Residual	- .01126683875 9184	.01120890304 4462	- .00000970176 2058	.00315804071 3949
Stud. Deleted Residual	-3.391	4.069	.002	1.056
Mahal. Distance	.034	27.946	1.977	4.708
Cook's Distance	.000	1.542	.036	.192
Centered Leverage Value	.000	.321	.023	.054

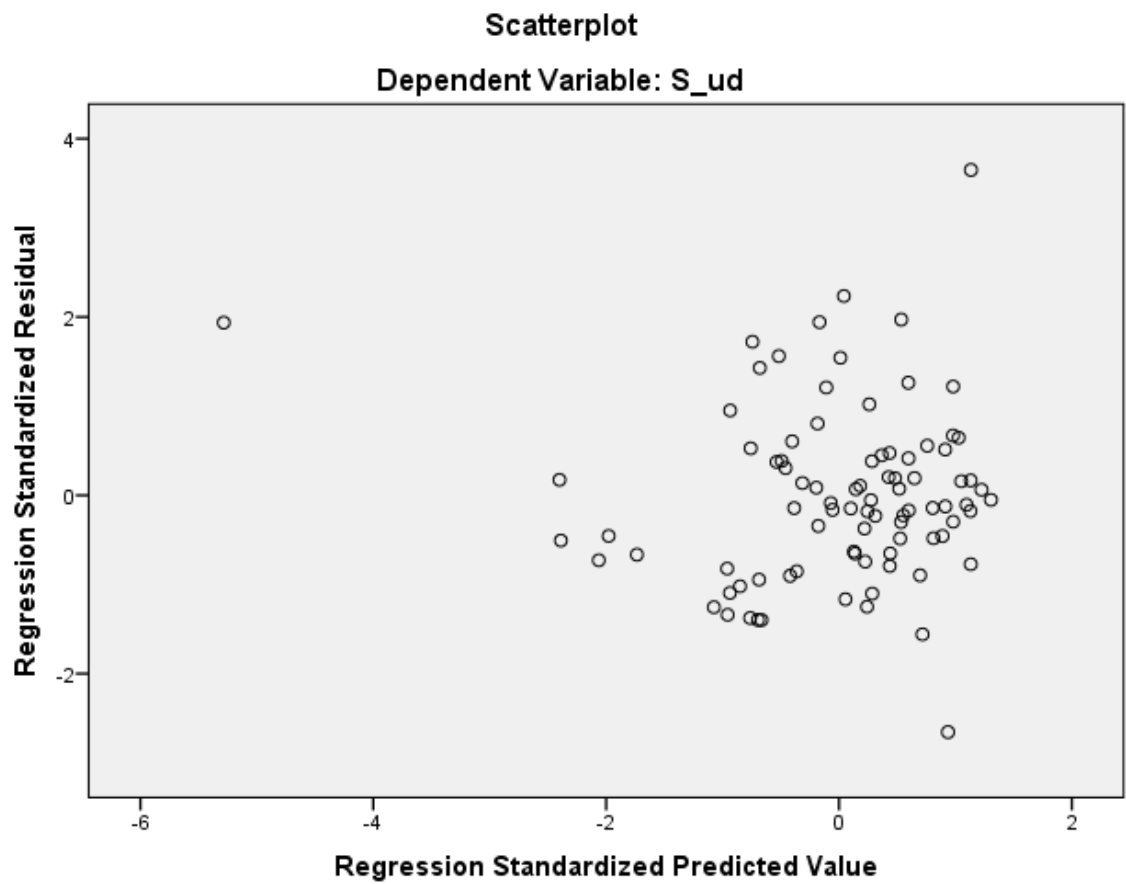
#### Residuals Statistics<sup>a</sup>

	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: 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		06-JUN-2015 10:49:04
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	86
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	00:00:00.22
	Elapsed Time	00:00:00.22
	Memory Required	6320 bytes
	Additional Memory	
	Required for Residual	0 bytes
Plots		
Variables Created or	COO_12	Cook's Distance
Modified		

**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).
2	AvgGL_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: S\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.520 <sup>a</sup>	.270	.262	.00347207364 1407
2	.763 <sup>b</sup>	.582	.572	.00264249265 1675

a. Predictors: (Constant), TSpaths\_ud

b. Predictors: (Constant), TSpaths\_ud, AvgGL\_ud



c. Dependent Variable: S\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	31.117	.000 <sup>b</sup>
	Residual	.001	84	.000		
	Total	.001	85			
2	Regression	.001	2	.000	57.871	.000 <sup>c</sup>
	Residual	.001	83	.000		
	Total	.001	85			

a. Dependent Variable: S\_ud

b. Predictors: (Constant), TSpaths\_ud

c. Predictors: (Constant), TSpaths\_ud, AvgGL\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.038	.005		7.862	.000

	TSpaths_ud	-2.483	.445	-.520	-5.578	.000
2	(Constant)	.041	.004		11.008	.000
	TSpaths_ud	-4.005	.390	-.839	-10.269	.000
	AvgGL_ud	1.299	.165	.643	7.875	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	TSpaths_ud	1.000	1.000
2	(Constant)		
	TSpaths_ud	.754	1.326
	AvgGL_ud	.754	1.326

a. Dependent Variable: S\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	GD_ud	.470 <sup>b</sup>	5.465	.000	.514	.873	1.146
	Tpaths_ud	.476 <sup>b</sup>	4.689	.000	.458	.675	1.482
	AvgPL_ud	.479 <sup>b</sup>	5.566	.000	.521	.864	1.157

	AvgGL_ud	.643 <sup>b</sup>	7.875	.000	.654	.754	1.326
2	GD_ud	.118 <sup>c</sup>	1.143	.256	.125	.469	2.134
	Tpaths_ud	.113 <sup>c</sup>	1.050	.297	.115	.438	2.283
	AvgPL_ud	.127 <sup>c</sup>	1.210	.230	.132	.458	2.184

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	GD_ud	.873
	Tpaths_ud	.675
	AvgPL_ud	.864
	AvgGL_ud	.754
2	GD_ud	.405
	Tpaths_ud	.438
	AvgPL_ud	.400

a. Dependent Variable: S\_ud

b. Predictors in the Model: (Constant), TSpaths\_ud

c. Predictors in the Model: (Constant), TSpaths\_ud, AvgGL\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	TSpaths_ud	AvgGL_ud
1	1	1.997	1.000	.00	.00	
	2	.003	25.725	1.00	1.00	
2	1	2.978	1.000	.00	.00	.00
	2	.019	12.395	.08	.02	.86
	3	.003	33.397	.92	.98	.13

a. Dependent Variable: S\_ud

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00154732284 1361	.01671556010 8423	.01109522924 3603	.00308354145 5155
Std. Predicted Value	-3.096	1.823	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00145085563 4175	.01827601529 6578	.01112188313 2068	.00312839770 1378
Residual	- .00487046455 9644	.00885301176 4586	.00000000000 0000	.00261121944 7770
Std. Residual	-1.843	3.350	.000	.988
Stud. Residual	-1.874	3.476	-.005	1.010

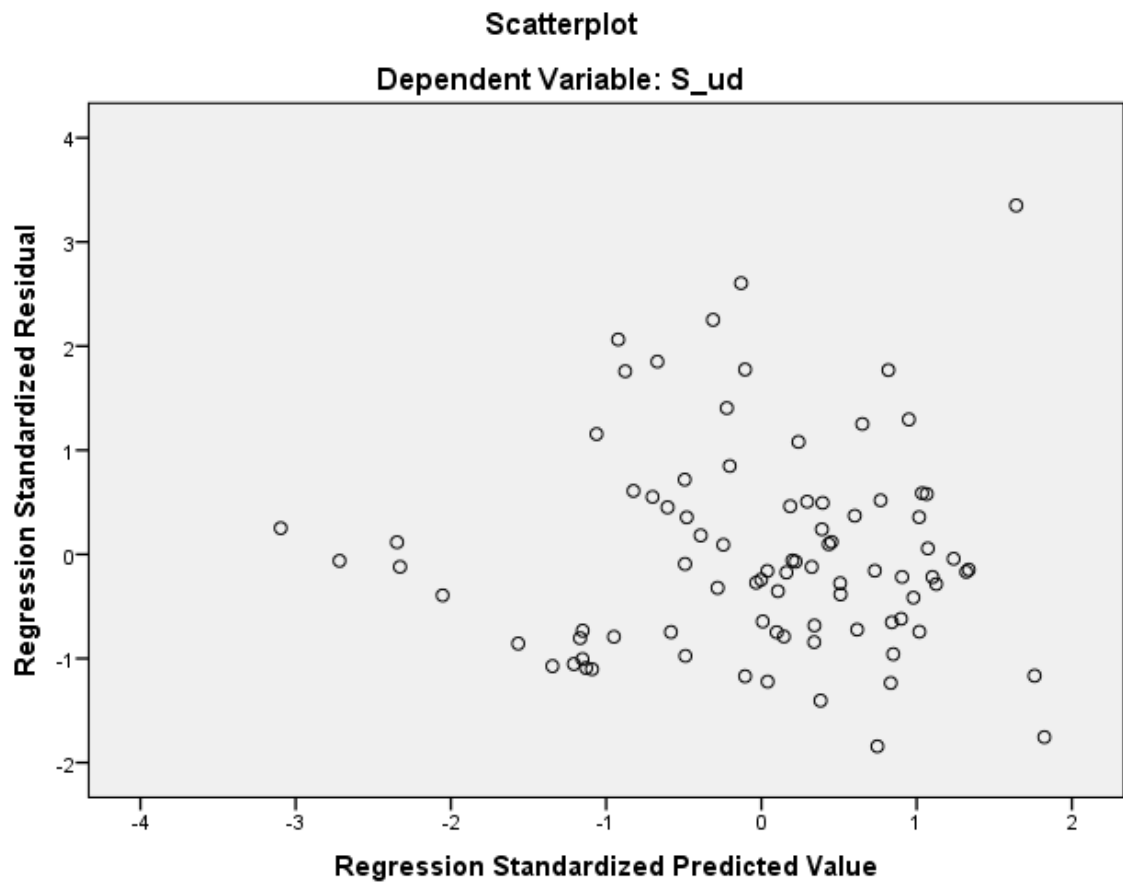
Deleted Residual	- .00528672477 2304	.00953225977 7188	- .00002665388 8465	.00273288602 8218
Stud. Deleted Residual	-1.903	3.738	.001	1.030
Mahal. Distance	.016	29.852	1.977	4.005
Cook's Distance	.000	.405	.017	.057
Centered Leverage Value	.000	.351	.023	.047

**Residuals Statistics<sup>a</sup>**

	N
Predicted Value	86
Std. Predicted Value	86
Standard Error of Predicted Value	86
Adjusted Predicted Value	86
Residual	86
Std. Residual	86
Stud. Residual	86
Deleted Residual	86
Stud. Deleted Residual	86
Mahal. Distance	86
Cook's Distance	86
Centered Leverage Value	86

a. Dependent Variable: S\_ud

## Charts



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		06-JUN-2015 10:40:48	
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 GD_ud  /METHOD=STEPWISE PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.23
	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	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	S_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: GD\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.693 <sup>a</sup>	.480	.474	.002956919147871
2	.730 <sup>b</sup>	.533	.522	.002818518363084

a. Predictors: (Constant), R\_ud

b. Predictors: (Constant), R\_ud, S\_ud

c. Dependent Variable: GD\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	82.096	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.001	2	.000	50.156	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			

a. Dependent Variable: GD\_ud

b. Predictors: (Constant), R\_ud

c. Predictors: (Constant), R\_ud, S\_ud

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	-.014	.003		-5.102	.000
	R_ud	2.307	.255	.693	9.061	.000
2	(Constant)	-.019	.003		-6.210	.000
	R_ud	3.004	.328	.902	9.153	.000
	S_ud	-.274	.087	-.311	-3.155	.002

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_ud	1.000	1.000
2	(Constant)		
	R_ud	.547	1.829
	S_ud	.547	1.829

a. Dependent Variable: GD\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	.013 <sup>b</sup>	.148	.883	.016	.818	1.223

	PL_TSpudN	.106 <sup>b</sup>	1.267	.208	.134	.837	1.195
	S_ud	-.311 <sup>b</sup>	-3.155	.002	-.319	.547	1.829
	SMSP_ud	-.007 <sup>b</sup>	-.073	.942	-.008	.722	1.386
2	PL_TpudN	.006 <sup>c</sup>	.074	.941	.008	.817	1.223
	PL_TSpudN	.057 <sup>c</sup>	.697	.488	.074	.803	1.246
	SMSP_ud	.104 <sup>c</sup>	1.131	.261	.120	.629	1.590

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpudN	.818
	PL_TSpudN	.837
	S_ud	.547
	SMSP_ud	.722
2	PL_TpudN	.482
	PL_TSpudN	.447
	SMSP_ud	.477

a. Dependent Variable: GD\_ud

b. Predictors in the Model: (Constant), R\_ud

c. Predictors in the Model: (Constant), R\_ud, S\_ud

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_ud	S_ud
1	1	1.994	1.000	.00	.00	
	2	.006	18.106	1.00	1.00	
2	1	2.908	1.000	.00	.00	.01
	2	.088	5.755	.03	.01	.61
	3	.004	27.428	.97	.99	.38

a. Dependent Variable: GD\_ud

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00342988874 7633	.01683328859 5080	.01098901098 9011	.00297560080 7627
Std. Predicted Value	-2.540	1.964	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00339370151 0504	.01618766784 6680	.01095413146 9153	.00295954584 2719
Residual	- .00477025983 8551	.00993535388 2611	.00000000000 0000	.00278702554 9354
Std. Residual	-1.692	3.525	.000	.989

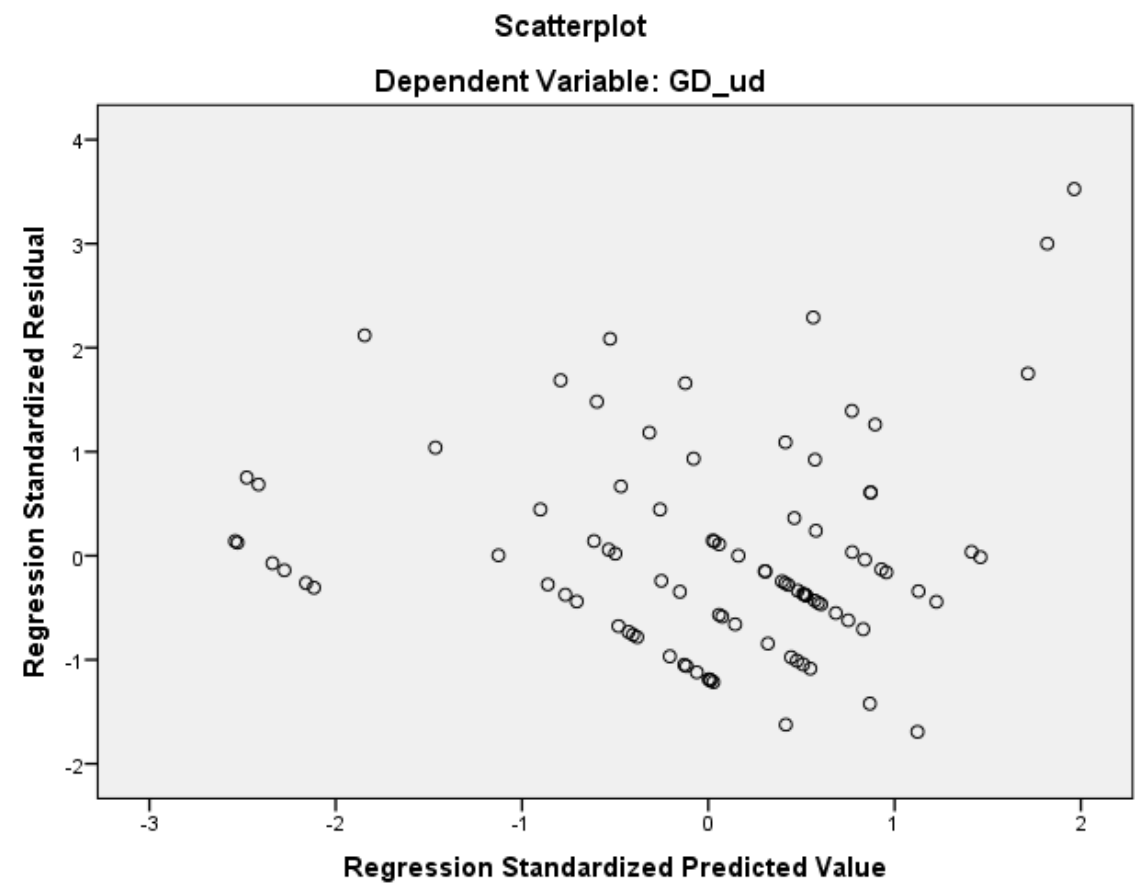
Stud. Residual	-1.715	3.638	.006	1.013
Deleted Residual	-	.01058097369	.00003487951	.00292658017
	.00489803263	9689	9857	9785
	9176			
Stud. Deleted Residual	-1.734	3.924	.014	1.037
Mahal. Distance	.021	14.242	1.978	2.473
Cook's Distance	.000	.429	.017	.058
Centered Leverage Value	.000	.158	.022	.027

#### 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\_ud

Charts



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		06-JUN-2015 10:41:06
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 Tpaths_ud  /METHOD=STEPWISE PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.28
	Elapsed Time	00:00:00.29
	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	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	S_ud		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).

a. Dependent Variable: Tpaths\_ud

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.576 <sup>a</sup>	.332	.324	.00257439897 8586
2	.708 <sup>b</sup>	.501	.490	.00223670150 3307
3	.741 <sup>c</sup>	.549	.534	.00213781442 3092

a. Predictors: (Constant), R\_ud

b. Predictors: (Constant), R\_ud, S\_ud

c. Predictors: (Constant), R\_ud, S\_ud, SMSP\_ud

d. Dependent Variable: Tpaths\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	44.156	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	44.199	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.001	90			

3	Regression	.000	3	.000	35.365	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.001	90			

a. Dependent Variable: Tpaths\_ud

b. Predictors: (Constant), R\_ud

c. Predictors: (Constant), R\_ud, S\_ud

d. Predictors: (Constant), R\_ud, S\_ud, SMSP\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.005	.002		-2.120	.037
	R_ud	1.473	.222	.576	6.645	.000
2	(Constant)	-.012	.002		-4.771	.000
	R_ud	2.432	.260	.951	9.337	.000
	S_ud	-.377	.069	-.557	-5.468	.000
3	(Constant)	-.009	.002		-3.907	.000
	R_ud	2.254	.256	.881	8.819	.000
	S_ud	-.455	.071	-.671	-6.436	.000
	SMSP_ud	.062	.020	.277	3.054	.003

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_ud	1.000	1.000
2	(Constant)		
	R_ud	.547	1.829
	S_ud	.547	1.829
3	(Constant)		
	R_ud	.519	1.929
	S_ud	.477	2.099
	SMSP_ud	.629	1.590

a. Dependent Variable: Tpaths\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	-.009 <sup>b</sup>	-.093	.926	-.010	.818	1.223
	PL_TSpudN	.174 <sup>b</sup>	1.858	.066	.194	.837	1.195
	S_ud	-.557 <sup>b</sup>	-5.468	.000	-.504	.547	1.829

	SMSP_ud	.068 <sup>b</sup>	.663	.509	.070	.722	1.386
2	PL_TpudN	-.021 <sup>c</sup>	-.247	.805	-.026	.817	1.223
	PL_TSpudN	.086 <sup>c</sup>	1.021	.310	.109	.803	1.246
	SMSP_ud	.277 <sup>c</sup>	3.054	.003	.311	.629	1.590
3	PL_TpudN	-.081 <sup>d</sup>	-.991	.324	-.106	.774	1.292
	PL_TSpudN	.087 <sup>d</sup>	1.084	.281	.116	.803	1.246

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpudN	.818
	PL_TSpudN	.837
	S_ud	.547
	SMSP_ud	.722
2	PL_TpudN	.482
	PL_TSpudN	.447
	SMSP_ud	.477
3	PL_TpudN	.471
	PL_TSpudN	.427

a. Dependent Variable: Tpaths\_ud

b. Predictors in the Model: (Constant), R\_ud

c. Predictors in the Model: (Constant), R\_ud, S\_ud

d. Predictors in the Model: (Constant), R\_ud, S\_ud, SMSP\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_ud	S_ud
1	1	1.994	1.000	.00	.00	
	2	.006	18.106	1.00	1.00	
2	1	2.908	1.000	.00	.00	.01
	2	.088	5.755	.03	.01	.61
	3	.004	27.428	.97	.99	.38
3	1	3.464	1.000	.00	.00	.01
	2	.467	2.724	.00	.00	.00
	3	.065	7.300	.02	.01	.78
	4	.004	30.853	.97	.99	.22

**Collinearity Diagnostics<sup>a</sup>**

Model                      Dimension		Variance Proportions
		SMSP_ud
1	1	
	2	
2	1	
	2	

	3	
3	1	.02
	2	.64
	3	.28
	4	.06

a. Dependent Variable: Tpaths\_ud

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00619238242 5070	.01597014069 5572	.01098901098 9011	.00232111354 6924
Std. Predicted Value	-2.067	2.146	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00620062649 2500	.01558012980 9678	.01095735138 1768	.00232019235 1503
Residual	- .00403472781 1813	.00739688565 9546	.00000000000 0000	.00210188220 9828
Std. Residual	-1.887	3.460	.000	.983
Stud. Residual	-1.914	3.604	.007	1.017
Deleted Residual	- .00415077293 2917	.00802518334 2397	.00003165960 7243	.00225265129 5636



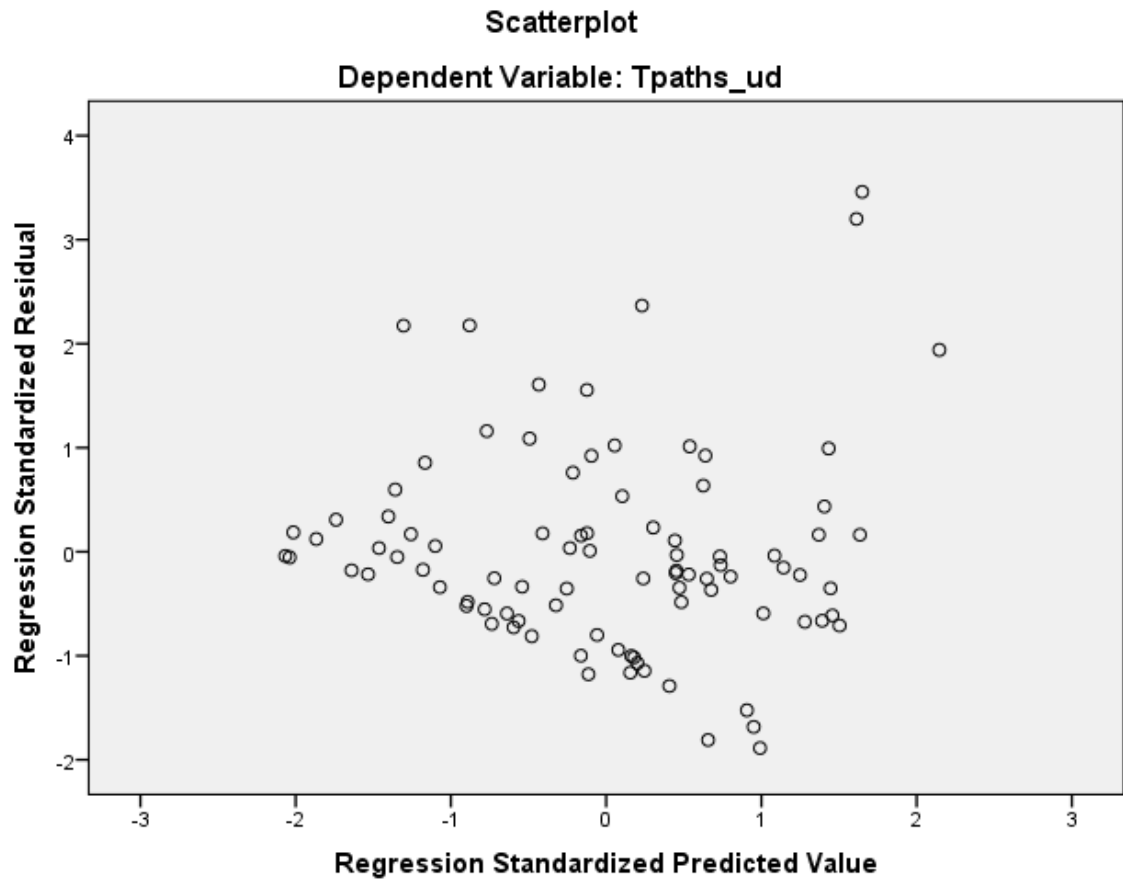
Stud. Deleted Residual	-1.945	3.885	.015	1.044
Mahal. Distance	.060	20.998	2.967	3.070
Cook's Distance	.000	.599	.019	.071
Centered Leverage Value	.001	.233	.033	.034

**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 TSpahs\_ud

/METHOD=STEPWISE PL\_TpudN PL\_TSpudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	06-JUN-2015 10:41:32	
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.

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_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	00:00:00.32
	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).
4	PL_TpudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: TSpaths\_ud

**Model Summary<sup>e</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.468 <sup>a</sup>	.219	.210	.00109657673 3507
2	.650 <sup>b</sup>	.422	.409	.00094827755 9108
3	.673 <sup>c</sup>	.453	.434	.00092788762 4945
4	.697 <sup>d</sup>	.486	.462	.00090464160 0354

a. Predictors: (Constant), S\_ud

b. Predictors: (Constant), S\_ud, SMSP\_ud

c. Predictors: (Constant), S\_ud, SMSP\_ud, PL\_TSpudN

d. Predictors: (Constant), S\_ud, SMSP\_ud, PL\_TSpudN,  
PL\_TpudN

e. Dependent Variable: TSpaths\_ud

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	.000	1	.000	24.910	.000 <sup>b</sup>
	Residual	.000	89	.000		
	Total	.000	90			
2	Regression	.000	2	.000	32.162	.000 <sup>c</sup>
	Residual	.000	88	.000		
	Total	.000	90			
3	Regression	.000	3	.000	24.031	.000 <sup>d</sup>
	Residual	.000	87	.000		
	Total	.000	90			
4	Regression	.000	4	.000	20.343	.000 <sup>e</sup>
	Residual	.000	86	.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

e. Predictors: (Constant), S\_ud, SMSP\_ud, PL\_TSpudN, PL\_TpudN

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	.012	.000		41.492	.000
	S_ud	-.125	.025	-.468	-4.991	.000
2	(Constant)	.013	.000		47.679	.000
	S_ud	-.211	.027	-.789	-7.932	.000
	SMSP_ud	.049	.009	.554	5.569	.000
3	(Constant)	.013	.000		46.542	.000
	S_ud	-.214	.026	-.801	-8.219	.000
	SMSP_ud	.047	.009	.534	5.461	.000
	PL_TSpudN	.019	.009	.178	2.216	.029
4	(Constant)	.013	.000		43.672	.000
	S_ud	-.211	.025	-.790	-8.297	.000
	SMSP_ud	.053	.009	.598	6.033	.000
	PL_TSpudN	.023	.009	.220	2.737	.008
	PL_TpudN	-.042	.018	-.202	-2.351	.021

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	S_ud	1.000	1.000
2	(Constant)		
	S_ud	.663	1.508



	SMSP_ud	.663	1.508
3	(Constant)		
	S_ud	.661	1.513
	SMSP_ud	.657	1.521
	PL_TSpudN	.974	1.027
4	(Constant)		
	S_ud	.659	1.517
	SMSP_ud	.607	1.647
	PL_TSpudN	.926	1.080
	PL_TpudN	.808	1.238

a. Dependent Variable: TSpaths\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	-.002 <sup>b</sup>	-.020	.984	-.002	.927	1.079
	PL_TSpudN	.219 <sup>b</sup>	2.373	.020	.245	.982	1.018
	R_ud	.270 <sup>b</sup>	2.171	.033	.225	.547	1.829
	SMSP_ud	.554 <sup>b</sup>	5.569	.000	.510	.663	1.508
2	PL_TpudN	-.150 <sup>c</sup>	-1.726	.088	-.182	.850	1.177
	PL_TSpudN	.178 <sup>c</sup>	2.216	.029	.231	.974	1.027

	R_ud	.138 <sup>c</sup>	1.229	.222	.131	.519	1.929
3	PL_TpudN	-.202 <sup>d</sup>	-2.351	.021	-.246	.808	1.238
	R_ud	.043 <sup>d</sup>	.355	.723	.038	.427	2.339
4	R_ud	.114 <sup>e</sup>	.937	.351	.101	.404	2.473

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpudN	.927
	PL_TSpudN	.982
	R_ud	.547
	SMSP_ud	.663
2	PL_TpudN	.608
	PL_TSpudN	.657
	R_ud	.477
3	PL_TpudN	.607
	R_ud	.427
4	R_ud	.404

a. Dependent Variable: TSpats\_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

e. Predictors in the Model: (Constant), S\_ud, SMSP\_ud, PL\_TSpudN, PL\_TpudN

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	S_ud	SMSP_ud
1	1	1.923	1.000	.04	.04	
	2	.077	4.982	.96	.96	
2	1	2.533	1.000	.02	.01	.05
	2	.408	2.491	.09	.01	.68
	3	.059	6.559	.89	.97	.28
3	1	3.101	1.000	.01	.01	.03
	2	.498	2.495	.01	.00	.42
	3	.343	3.006	.12	.04	.27
	4	.058	7.284	.87	.95	.28
4	1	3.941	1.000	.01	.01	.02
	2	.499	2.812	.00	.00	.41
	3	.359	3.313	.06	.02	.26
	4	.146	5.190	.05	.16	.00
	5	.055	8.486	.88	.82	.32

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Variance Proportions
-------	-----------	----------------------

		PL_TSpudN	PL_TpudN
1	1		
	2		
2	1		
	2		
	3		
3	1	.03	
	2	.46	
	3	.49	
	4	.01	
4	1	.02	.01
	2	.41	.00
	3	.55	.03
	4	.02	.86
	5	.00	.10

a. Dependent Variable: TSpaths\_ud

# Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00940620806 0682	.01289954409 0033	.01098901098 9011	.00086019147 7454

Std. Predicted Value	-1.840	2.221	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.00921337027 1027	.01282155420 6312	.01097606822 1802	.00086791188 9406
Residual	- .00120561919 1751	.00498896325 0071	.00000000000 0000	.00088430997 9323
Std. Residual	-1.333	5.515	.000	.978
Stud. Residual	-1.423	5.830	.007	1.034
Deleted Residual	- .00137549033 3885	.00557612953 7076	.00001294276 7209	.00099209354 2555
Stud. Deleted Residual	-1.432	7.454	.030	1.157
Mahal. Distance	.377	23.907	3.956	3.279
Cook's Distance	.000	.826	.027	.121
Centered Leverage Value	.004	.266	.044	.036

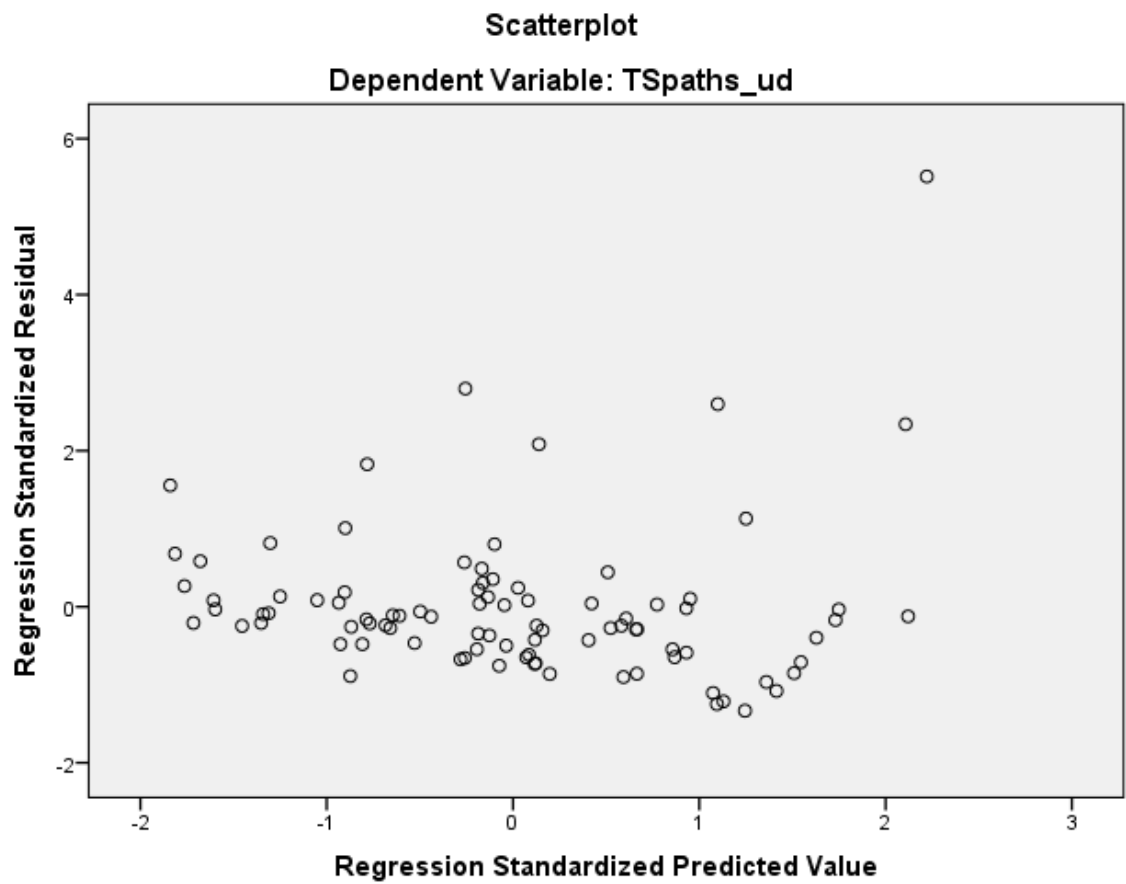
#### Residuals Statistics<sup>a</sup>

	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: 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

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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 AvgPL_ud  /METHOD=STEPWISE PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.
Resources	Processor Time	00:00:00.19
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	Memory Required	6000 bytes
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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	R_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
2	S_ud		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).

a. Dependent Variable: AvgPL\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.693 <sup>a</sup>	.480	.474	.00300646888 2594
2	.731 <sup>b</sup>	.535	.524	.00286020620 6296

a. Predictors: (Constant), R\_ud

b. Predictors: (Constant), R\_ud, S\_ud

c. Dependent Variable: AvgPL\_ud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	82.245	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	50.603	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

a. Dependent Variable: AvgPL\_ud

b. Predictors: (Constant), R\_ud

c. Predictors: (Constant), R\_ud, S\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.015	.003		-5.174	.000

	R_ud	2.348	.259	.693	9.069	.000
2	(Constant)	-.020	.003		-6.315	.000
	R_ud	3.068	.333	.906	9.213	.000
	S_ud	-.284	.088	-.316	-3.215	.002

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_ud	1.000	1.000
2	(Constant)		
	R_ud	.547	1.829
	S_ud	.547	1.829

a. Dependent Variable: AvgPL\_ud

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	-.010 <sup>b</sup>	-.118	.906	-.013	.818	1.223
	PL_TSpudN	.114 <sup>b</sup>	1.368	.175	.144	.837	1.195
	S_ud	-.316 <sup>b</sup>	-3.215	.002	-.324	.547	1.829

	SMSP_ud	-.007 <sup>b</sup>	-.073	.942	-.008	.722	1.386
2	PL_TpudN	-.017 <sup>c</sup>	-.207	.837	-.022	.817	1.223
	PL_TSpudN	.064 <sup>c</sup>	.792	.430	.085	.803	1.246
	SMSP_ud	.106 <sup>c</sup>	1.154	.252	.123	.629	1.590

#### Excluded Variables<sup>a</sup>

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpudN	.818
	PL_TSpudN	.837
	S_ud	.547
	SMSP_ud	.722
2	PL_TpudN	.482
	PL_TSpudN	.447
	SMSP_ud	.477

a. Dependent Variable: AvgPL\_ud

b. Predictors in the Model: (Constant), R\_ud

c. Predictors in the Model: (Constant), R\_ud, S\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions
-------	-----------	------------	-----------	----------------------

			Index	(Constant)	R_ud	S_ud
1	1	1.994	1.000	.00	.00	
	2	.006	18.106	1.00	1.00	
2	1	2.908	1.000	.00	.00	.01
	2	.088	5.755	.03	.01	.61
	3	.004	27.428	.97	.99	.38

a. Dependent Variable: AvgPL\_ud

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00328914378 7697	.01695770956 5759	.01098901098 9011	.00303305489 7468
Std. Predicted Value	-2.539	1.968	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00323464255 7800	.01629013381 8984	.01095272286 6507	.00301766768 6876
Residual	- .00514853280 0376	.01027321815 4907	.00000000000 0000	.00282824759 1989
Std. Residual	-1.800	3.592	.000	.989
Stud. Residual	-1.824	3.707	.006	1.013

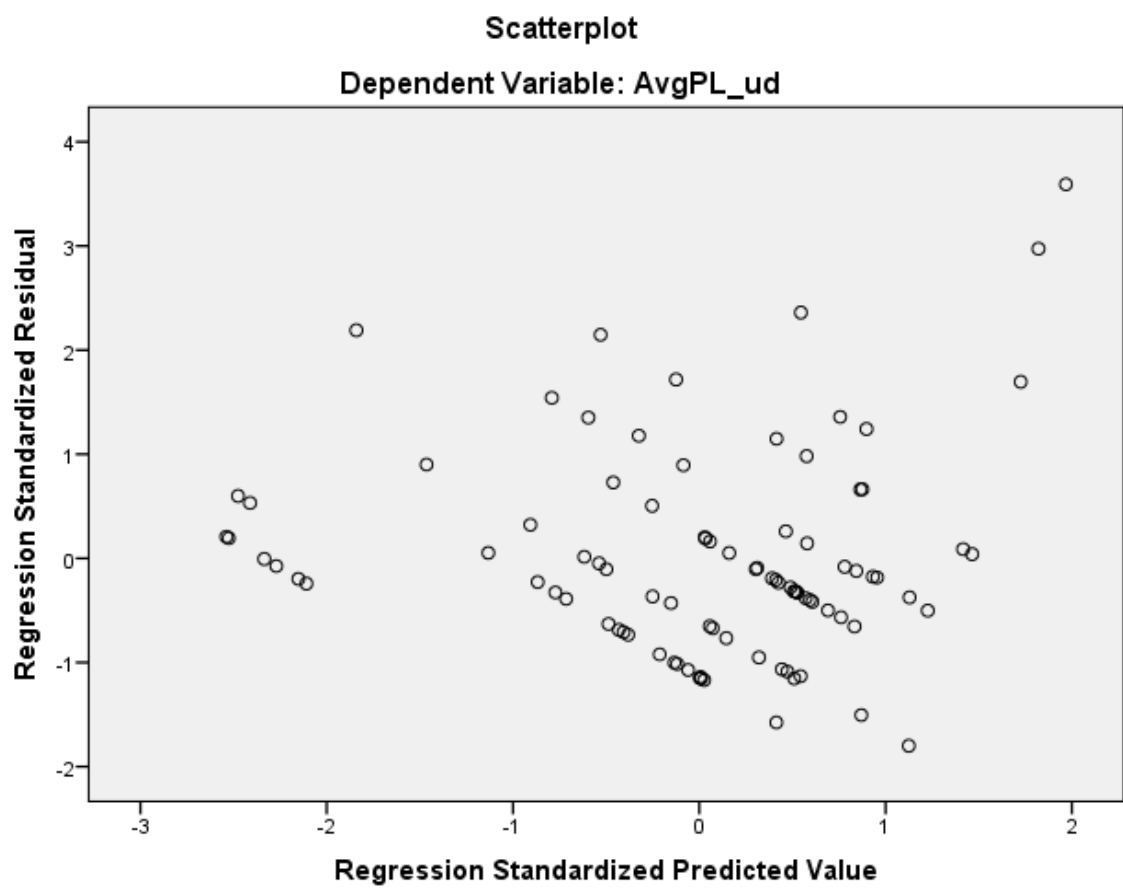
Deleted Residual	- .00528643745 9290	.01094079390 1682	.00003628812 2504	.00297062485 1820
Stud. Deleted Residual	-1.849	4.012	.014	1.038
Mahal. Distance	.021	14.242	1.978	2.473
Cook's Distance	.000	.455	.017	.060
Centered Leverage Value	.000	.158	.022	.027

**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: AvgPL\_ud

## Charts



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.

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## 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.
	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	00:00:00.20
	Elapsed Time	00:00:00.24
	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).

a. Dependent Variable: AvgGL\_ud

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.564 <sup>a</sup>	.318	.311	.00257922429 8724

2	.593 <sup>b</sup>	.352	.337	.00252963886 6495
---	-------------------	------	------	----------------------

a. Predictors: (Constant), R\_ud

b. Predictors: (Constant), R\_ud, PL\_TSpudN

c. Dependent Variable: AvgGL\_ud

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	41.540	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			
2	Regression	.000	2	.000	23.854	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.001	90			

a. Dependent Variable: AvgGL\_ud

b. Predictors: (Constant), R\_ud

c. Predictors: (Constant), R\_ud, PL\_TSpudN

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.005	.002		-1.930	.057
	R_ud	1.431	.222	.564	6.445	.000
2	(Constant)	-.003	.003		-1.218	.226
	R_ud	1.227	.238	.484	5.154	.000
	PL_TSpudN	.054	.025	.200	2.127	.036

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_ud	1.000	1.000
2	(Constant)		
	R_ud	.837	1.195
	PL_TSpudN	.837	1.195

a. Dependent Variable: AvgGL\_ud

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial	Collinearity Statistics
-------	---------	---	------	---------	-------------------------

					Correlation	Tolerance	VIF
1	PL_TpudN	-.144 <sup>b</sup>	-1.496	.138	-.157	.818	1.223
	PL_TSpudN	.200 <sup>b</sup>	2.127	.036	.221	.837	1.195
	S_ud	-.222 <sup>b</sup>	-1.899	.061	-.198	.547	1.829
	SMSP_ud	-.113 <sup>b</sup>	-1.096	.276	-.116	.722	1.386
2	PL_TpudN	-.168 <sup>c</sup>	-1.781	.078	-.188	.808	1.238
	S_ud	-.179 <sup>c</sup>	-1.519	.132	-.161	.524	1.908
	SMSP_ud	-.097 <sup>c</sup>	-.954	.343	-.102	.717	1.394

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics
		Minimum Tolerance
1	PL_TpudN	.818
	PL_TSpudN	.837
	S_ud	.547
	SMSP_ud	.722
2	PL_TpudN	.727
	S_ud	.447
	SMSP_ud	.615

a. Dependent Variable: AvgGL\_ud

b. Predictors in the Model: (Constant), R\_ud

c. Predictors in the Model: (Constant), R\_ud, PL\_TSpudN

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	R_ud	PL_TSpudN
1	1	1.994	1.000	.00	.00	
	2	.006	18.106	1.00	1.00	
2	1	2.611	1.000	.00	.00	.05
	2	.384	2.609	.00	.00	.82
	3	.005	22.208	.99	1.00	.13

a. Dependent Variable: AvgGL\_ud

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00661092763 7666	.01451585441 8278	.01098901098 9011	.00184174867 1362
Std. Predicted Value	-2.377	1.915	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00649028411 1351	.01421545632 1836	.01097026626 5977	.00185128469 7198

Residual	- .00247070286 4230	.01282562036 0672	.00000000000 0000	.00250137385 7947
Std. Residual	-.977	5.070	.000	.989
Stud. Residual	-.994	5.177	.004	1.009
Deleted Residual	- .00257610972 0394	.01337050460 2790	.00001874472 3034	.00260527468 1698
Stud. Deleted Residual	-.994	6.172	.024	1.096
Mahal. Distance	.059	6.367	1.978	1.746
Cook's Distance	.000	.380	.014	.048
Centered Leverage Value	.001	.071	.022	.019

#### Residuals Statistics<sup>a</sup>

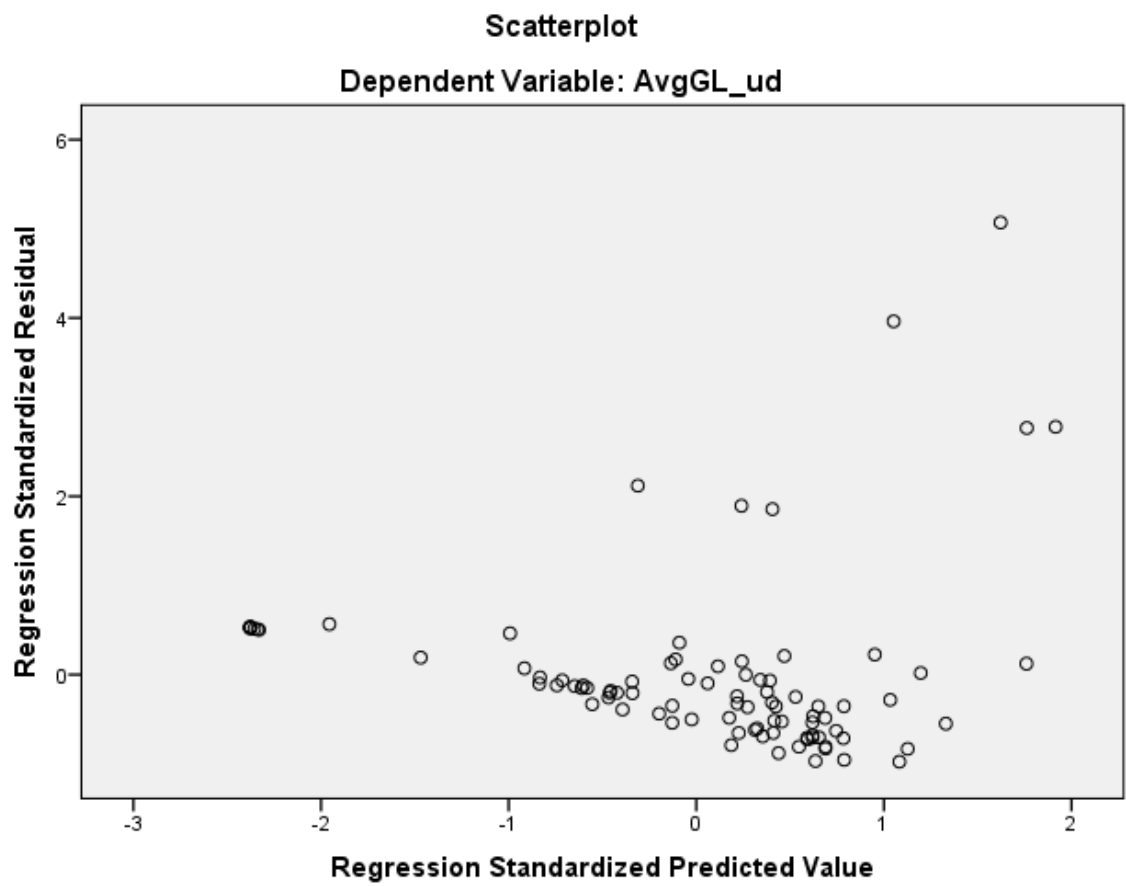
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91



Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: 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

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	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 ECud  /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		00:00:00.21
	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	SMSP_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	.378 <sup>a</sup>	.143	.133	.00347428063 6012

a. Predictors: (Constant), SMSP\_ud

b. Dependent Variable: ECud

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	14.840	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: ECud

b. Predictors: (Constant), SMSP\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.012	.000		26.075	.000
	SMSP_ud	-.101	.026	-.378	-3.852	.000

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SMSP_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	PL_TpudN	-.018 <sup>b</sup>	-.173	.863	-.018	.853	1.172
	PL_TSpudN	-.087 <sup>b</sup>	-.879	.382	-.093	.977	1.024
	S_ud	.220 <sup>b</sup>	1.854	.067	.194	.663	1.508
	R_ud	.005 <sup>b</sup>	.047	.963	.005	.722	1.386

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpudN	.853	
	PL_TSpudN	.977	
	S_ud	.663	

R_ud	.722
------	------

a. Dependent Variable: ECud

b. Predictors in the Model: (Constant), SMSP\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	SMSP_ud
1	1	1.619	1.000	.19	.19
	2	.381	2.063	.81	.81

a. Dependent Variable: ECud

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00536281615 4957	.01209579594 4333	.01098901098 9011	.00141077830 7464
Std. Predicted Value	-3.988	.785	.000	1.000
Standard Error of Predicted Value	.000	.002	.000	.000
Adjusted Predicted Value	.00438357749 9539	.01215850375 5927	.01097542256 1465	.00145981140 4363

Residual	- .00971027184 2778	.00612216955 0508	.00000000000 0000	.00345492516 1533
Std. Residual	-2.795	1.762	.000	.994
Stud. Residual	-2.816	1.825	.002	1.008
Deleted Residual	- .00985827017 5755	.00656451703 9806	.00001358842 7546	.00355542437 0851
Stud. Deleted Residual	-2.934	1.849	-.004	1.021
Mahal. Distance	.000	15.904	.989	2.132
Cook's Distance	.000	.212	.015	.032
Centered Leverage Value	.000	.177	.011	.024

#### Residuals Statistics<sup>a</sup>

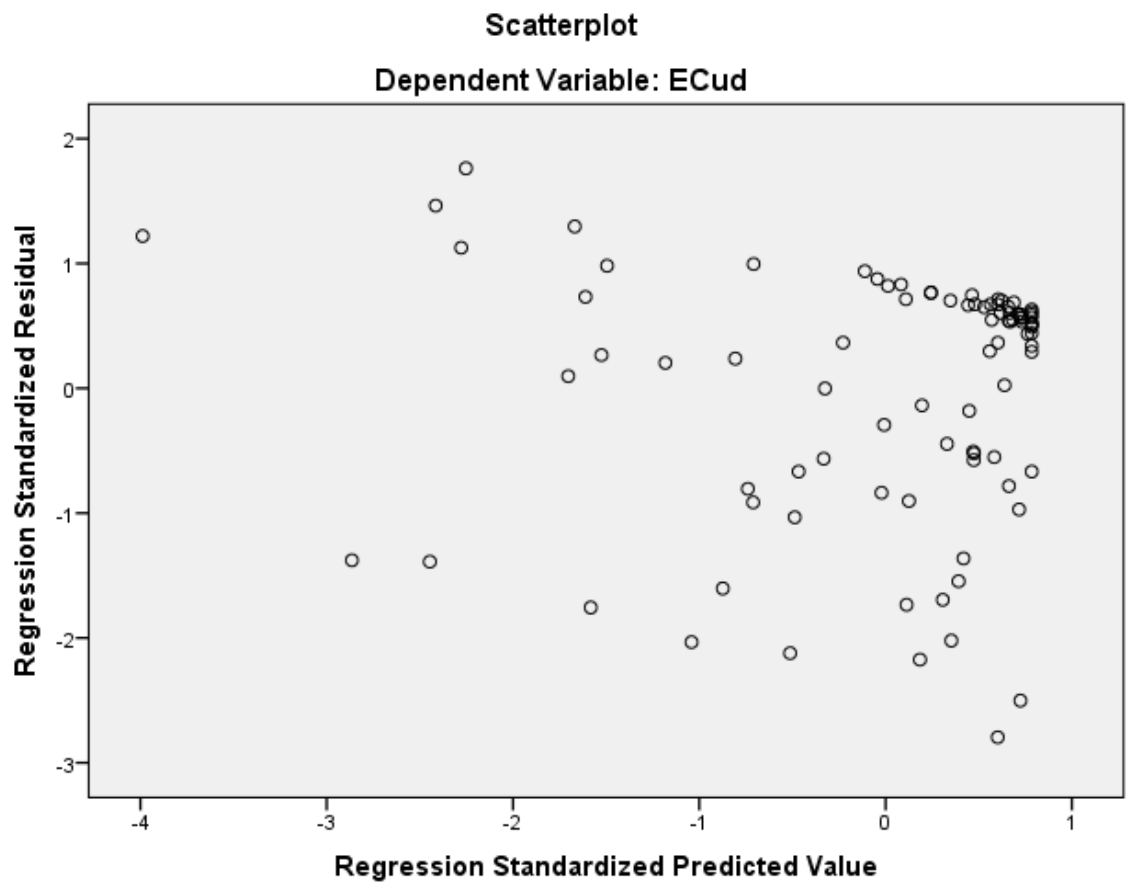
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91



Cook's Distance	91
Centered Leverage Value	91

a. Dependent Variable: 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	06-JUN-2015 10:57:28	
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_EVCudN  /METHOD=STEPWISE 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	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	R_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	.207 <sup>a</sup>	.043	.032	.00289458411 3436

a. Predictors: (Constant), R\_ud

b. Dependent Variable: PL\_EVCudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	3.992	.049 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.001	90			

a. Dependent Variable: PL\_EVCudN

b. Predictors: (Constant), R\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.003		2.002	.048
	R_ud	.498	.249	.207	1.998	.049

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	R_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	PL_TpudN	-.069 <sup>b</sup>	-.598	.551	-.064	.818	1.223
	PL_TSpudN	-.049 <sup>b</sup>	-.431	.667	-.046	.837	1.195
	S_ud	-.067 <sup>b</sup>	-.475	.636	-.051	.547	1.829
	SMSP_ud	.058 <sup>b</sup>	.470	.640	.050	.722	1.386

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpudN	.818	
	PL_TSpudN	.837	
	S_ud	.547	

SMSP_ud	.722
---------	------

a. Dependent Variable: PL\_EVCudN

b. Predictors in the Model: (Constant), R\_ud

#### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	R_ud
1	1	1.994	1.000	.00	.00
	2	.006	18.106	1.00	1.00

a. Dependent Variable: PL\_EVCudN

#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.00945139955 7292	.01203136332 3331	.01098901098 9011	.00060961065 3308
Std. Predicted Value	-2.522	1.710	.000	1.000
Standard Error of Predicted Value	.000	.001	.000	.000
Adjusted Predicted Value	.00932739023 1192	.01217716000 9742	.01098622510 8310	.00062167826 9436

Residual	- .01114702783 5250	.00759522477 1649	.00000000000 0000	.00287845817 1174
Std. Residual	-3.851	2.624	.000	.994
Stud. Residual	-3.874	2.654	.000	1.003
Deleted Residual	- .01127939764 4103	.00777160190 0458	.00000278588 0701	.00292983330 1144
Stud. Deleted Residual	-4.225	2.750	-.002	1.025
Mahal. Distance	.000	6.362	.989	1.805
Cook's Distance	.000	.089	.009	.014
Centered Leverage Value	.000	.071	.011	.020

**Residuals Statistics<sup>a</sup>**

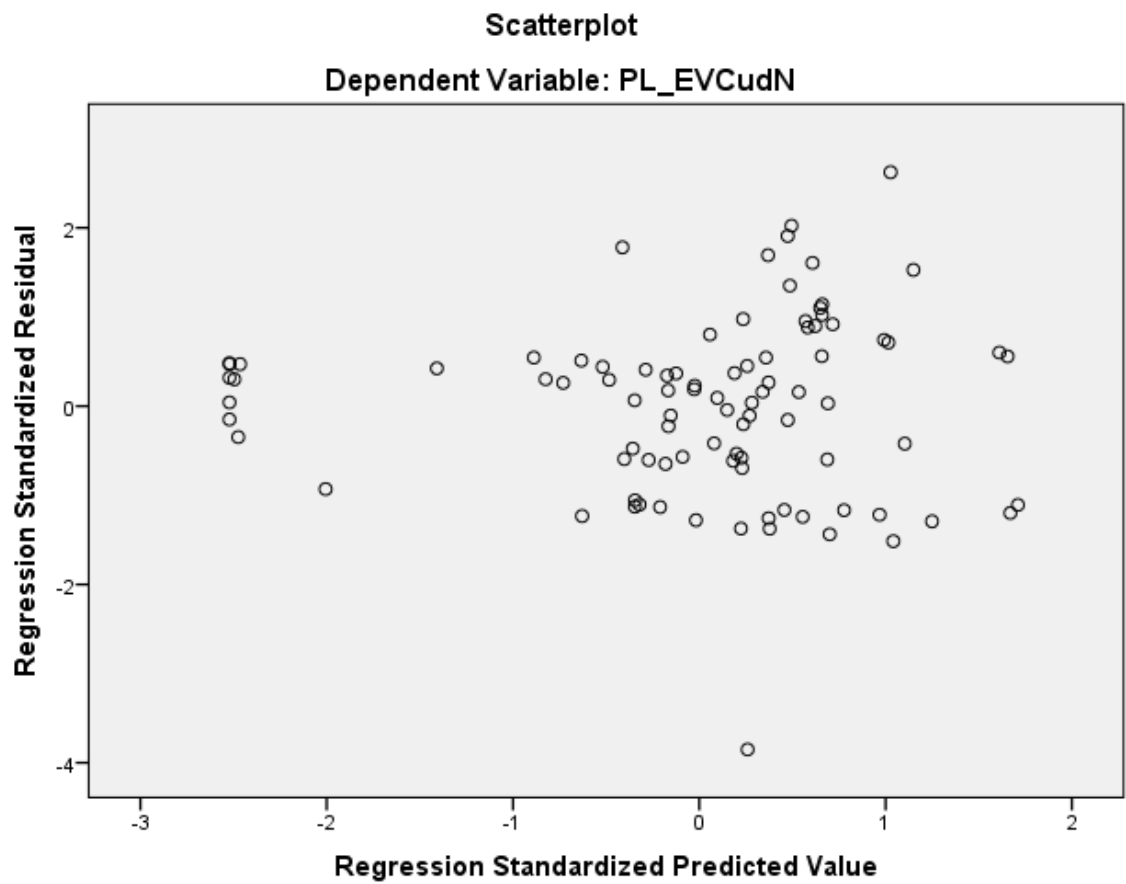
	N
Predicted Value	91
Std. Predicted Value	91
Standard Error of Predicted Value	91
Adjusted Predicted Value	91
Residual	91
Std. Residual	91
Stud. Residual	91
Deleted Residual	91
Stud. Deleted Residual	91
Mahal. Distance	91



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 PL\_TpudN PL\_TSpudN S\_ud R\_ud SMSP\_ud

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/SAVE COOK.

## Regression

### Notes

Output Created	06-JUN-2015 10:57:50
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
Resources		/DEPENDENT EVCud_TpudN
		/METHOD=STEPWISE PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud
		/SCATTERPLOT=(*ZRESID ,*ZPRED)
		/SAVE COOK.
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.21
	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	PL_TpudN		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: EVCud\_TpudN

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.614 <sup>a</sup>	.377	.370	.00329064684 3205
2	.669 <sup>b</sup>	.448	.435	.00311569292 0046

a. Predictors: (Constant), PL\_TpudN

b. Predictors: (Constant), PL\_TpudN, R\_ud

c. Dependent Variable: EVCud\_TpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	53.859	.000 <sup>b</sup>
	Residual	.001	89	.000		
	Total	.002	90			
2	Regression	.001	2	.000	35.677	.000 <sup>c</sup>
	Residual	.001	88	.000		
	Total	.002	90			

a. Dependent Variable: EVCud\_TpudN

b. Predictors: (Constant), PL\_TpudN

c. Predictors: (Constant), PL\_TpudN, R\_ud

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.006	.001		8.685	.000
	PL_TpudN	.426	.058	.614	7.339	.000
2	(Constant)	-.004	.003		-1.207	.231
	PL_TpudN	.339	.061	.488	5.577	.000
	R_ud	.996	.297	.294	3.358	.001

**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PL_TpudN	1.000	1.000
2	(Constant)		
	PL_TpudN	.818	1.223
	R_ud	.818	1.223

a. Dependent Variable: EVCud\_TpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TSpudN	-.053 <sup>b</sup>	-.603	.548	-.064	.931	1.074
	S_ud	.263 <sup>b</sup>	3.176	.002	.321	.927	1.079
	R_ud	.294 <sup>b</sup>	3.358	.001	.337	.818	1.223
	SMSP_ud	.206 <sup>b</sup>	2.324	.022	.240	.853	1.172
2	PL_TSpudN	-.163 <sup>c</sup>	-1.895	.061	-.199	.827	1.209
	S_ud	.146 <sup>c</sup>	1.366	.175	.145	.546	1.830
	SMSP_ud	.099 <sup>c</sup>	1.037	.303	.110	.691	1.447

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TSpudN		
	S_ud		
	R_ud		
	SMSP_ud		
2	PL_TSpudN		

S_ud	.482
SMSP_ud	.663

- a. Dependent Variable: EVCud\_TpudN
- b. Predictors in the Model: (Constant), PL\_TpudN
- c. Predictors in the Model: (Constant), PL\_TpudN, R\_ud

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PL_TpudN	R_ud
1	1	1.880	1.000	.06	.06	
	2	.120	3.955	.94	.94	
2	1	2.848	1.000	.00	.02	.00
	2	.147	4.406	.02	.86	.01
	3	.005	23.042	.98	.12	.99

- a. Dependent Variable: EVCud\_TpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
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Predicted Value	.00418516015 6339	.01693745516 2406	.01098901098 9011	.00277422601 3830
Std. Predicted Value	-2.453	2.144	.000	1.000
Standard Error of Predicted Value	.000	.001	.001	.000
Adjusted Predicted Value	.00372278899 8857	.01742659509 1820	.01100461088 5196	.00280848316 4560
Residual	- .00685783242 8068	.00899572670 4597	.00000000000 0000	.00308087961 5987
Std. Residual	-2.201	2.887	.000	.989
Stud. Residual	-2.312	3.017	-.002	1.016
Deleted Residual	- .00756771257 1472	.00982252135 8728	- .00001559989 6185	.00325423420 0308
Stud. Deleted Residual	-2.372	3.168	.001	1.030
Mahal. Distance	.061	7.453	1.978	2.349
Cook's Distance	.000	.279	.019	.048
Centered Leverage Value	.001	.083	.022	.026

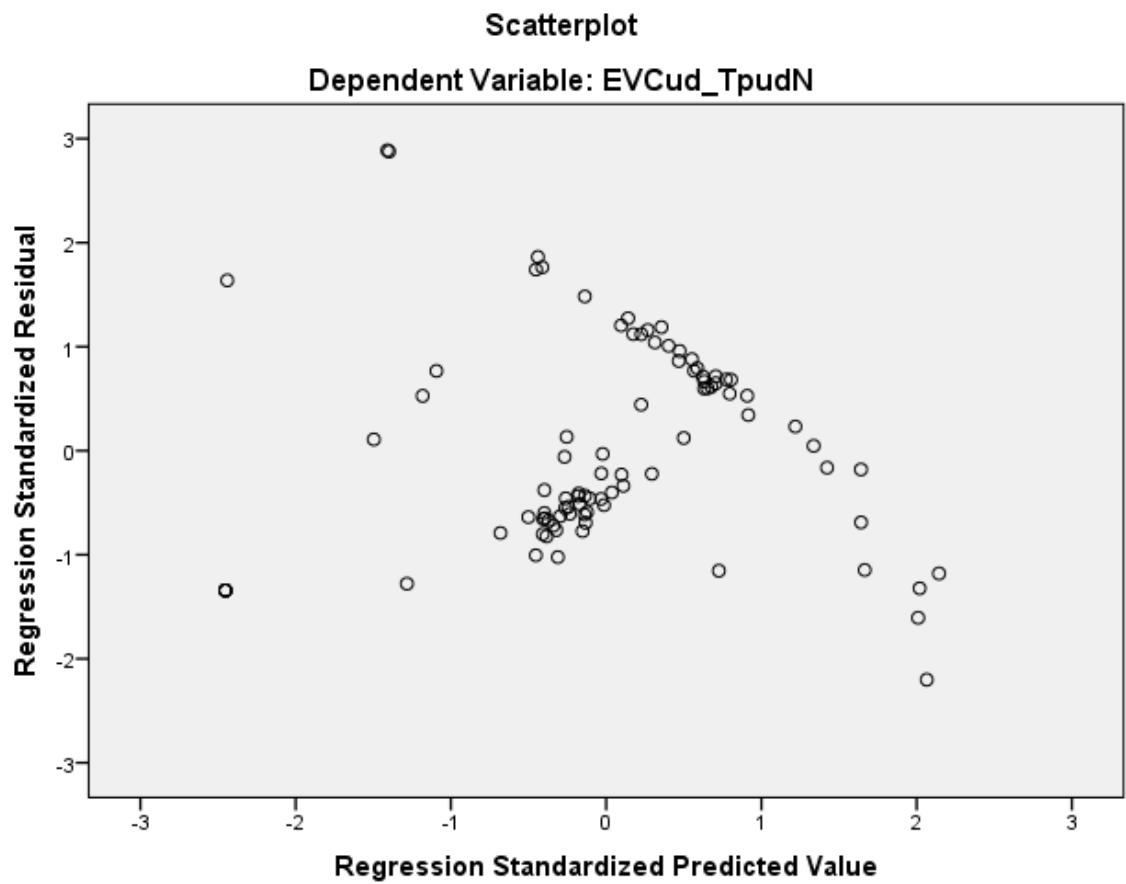
#### Residuals Statistics<sup>a</sup>

	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: EVCud\_TpudN

## Charts



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		06-JUN-2015 10:58:10
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 EVCud_TSpudN  /METHOD=STEPWISE PL_TpudN PL_TSpudN S_ud R_ud SMSP_ud  /SCATTERPLOT=(*ZRESID ,*ZPRED)  /SAVE COOK.	
Resources	Processor Time		00:00:00.22
	Elapsed Time		00:00:00.22
	Memory Required	6000 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
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1	PL_TSpudN		Stepwise (Criteria: Probability-of- F-to-enter <= .050, Probability-of- F-to-remove >= .100).
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a. Dependent Variable: EVCud\_TSpudN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.235 <sup>a</sup>	.055	.045	.00042814007 2944

a. Predictors: (Constant), PL\_TSpudN

b. Dependent Variable: EVCud\_TSpudN

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	5.220	.025 <sup>b</sup>
	Residual	.000	89	.000		

Total	.000	90			
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a. Dependent Variable: EVCud\_TSpudN

b. Predictors: (Constant), PL\_TSpudN

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.011	.000		178.554	.000
PL_TSpudN	-.009	.004	-.235	-2.285	.025

**Coefficients<sup>a</sup>**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
PL_TSpudN	1.000	1.000

a. Dependent Variable: EVCud\_TSpudN

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	PL_TpudN	-.096 <sup>b</sup>	-.901	.370	-.096	.931	1.074
	S_ud	-.021 <sup>b</sup>	-.200	.842	-.021	.982	1.018
	R_ud	-.008 <sup>b</sup>	-.067	.947	-.007	.837	1.195
	SMSP_ud	-.004 <sup>b</sup>	-.038	.970	-.004	.977	1.024

**Excluded Variables<sup>a</sup>**

Model		Collinearity Statistics	
		Minimum Tolerance	
1	PL_TpudN	.931	
	S_ud	.982	
	R_ud	.837	
	SMSP_ud	.977	

a. Dependent Variable: EVCud\_TSpudN

b. Predictors in the Model: (Constant), PL\_TSpudN

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	PL_TSpudN



1	1	1.691	1.000	.15	.15
	2	.309	2.340	.85	.85

a. Dependent Variable: EVCud\_TSpudN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	.01077828928 8282	.01108704879 8800	.01098901098 9011	.00010310989 7846
Std. Predicted Value	-2.044	.951	.000	1.000
Standard Error of Predicted Value	.000	.000	.000	.000
Adjusted Predicted Value	.01076970063 1499	.01111994590 6103	.01098982569 6042	.00010288160 9545
Residual	- .00162605522 2005	.00129423884 2092	.00000000000 0000	.00042575487 2921
Std. Residual	-3.798	3.023	.000	.994
Stud. Residual	-3.912	3.042	-.001	1.009
Deleted Residual	- .00172506517 2650	.00131075875 8336	- .00000081470 7031	.00043841010 9275
Stud. Deleted Residual	-4.275	3.196	-.017	1.074
Mahal. Distance	.047	4.177	.989	.720
Cook's Distance	.000	.466	.015	.059

Centered Leverage Value	.001	.046	.011	.008
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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: EVCud\_TSpudN

## Charts

### Scatterplot

Dependent Variable: EVCud\_TSpudN

