

```

GET
  FILE='D:\SOC6100\Assignments\Assignment02\Results\Townes_SOC6100_Assignment0
2_Data.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) BCOV R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT logCRECEIVE
  /METHOD=ENTER CLAIMS CMADE GENERAL GYEAR ORIGINAL RATIOCIT
  /METHOD=ENTER CLAIMSORIGINAL SECDUPBD SELFCTUB
  /RESIDUALS DURBIN
  /CASEWISE PLOT(ZRESID) OUTLIERS(3).

```

## Regression

[DataSet1] D:\SOC6100\Assignments\Assignment02\Results\Townes\_SOC6100\_Assignme  
nt02\_Data.sav

### Descriptive Statistics

	Mean	Std. Deviation	N
logCRECEIVE	.8039315819	.8041132905	1667
CLAIMS	15.52	12.480	1667
CMADE	10.76	13.775	1667
GENERAL	.201574	.2624779	1667
GYEAR	1996.28	1.073	1667
ORIGINAL	.396933	.2769866	1667
RATIOCIT	.955843	.1180271	1667
CLAIMSORIGINAL	6.525935	8.5131005	1667
SECDUPBD	.20	.342	1667
SELFCTUB	.14	.231	1667

### Correlations

		logCRECEIVE	CLAIMS	CMADE	GENERAL
Pearson Correlation	logCRECEIVE	1.000	.100	.018	.612
	CLAIMS	.100	1.000	.167	.063
	CMADE	.018	.167	1.000	.067
	GENERAL	.612	.063	.067	1.000
	GYEAR	-.350	.030	.072	-.242
	ORIGINAL	.018	.106	.288	.191
	RATIOCIT	.077	.012	-.104	.031
	CLAIMSORIGINAL	.077	.750	.286	.161
	SECDUPBD	-.015	.006	.013	-.058
	SELFCTUB	-.006	-.007	-.056	-.024
Sig. (1-tailed)	logCRECEIVE	.	.000	.232	.000
	CLAIMS	.000	.	.000	.005
	CMADE	.232	.000	.	.003
	GENERAL	.000	.005	.003	.
	GYEAR	.000	.114	.002	.000
	ORIGINAL	.233	.000	.000	.000
	RATIOCIT	.001	.317	.000	.105
	CLAIMSORIGINAL	.001	.000	.000	.000
	SECDUPBD	.270	.401	.303	.009
	SELFCTUB	.400	.385	.012	.168
N	logCRECEIVE	1667	1667	1667	1667
	CLAIMS	1667	1667	1667	1667
	CMADE	1667	1667	1667	1667
	GENERAL	1667	1667	1667	1667
	GYEAR	1667	1667	1667	1667
	ORIGINAL	1667	1667	1667	1667
	RATIOCIT	1667	1667	1667	1667
	CLAIMSORIGINAL	1667	1667	1667	1667
	SECDUPBD	1667	1667	1667	1667
	SELFCTUB	1667	1667	1667	1667

### Correlations

		GYEAR	ORIGINAL	RATIOCIT	CLAIMSORIGI NAL
Pearson Correlation	logCRECEIVE	-.350	.018	.077	.077
	CLAIMS	.030	.106	.012	.750
	CMADE	.072	.288	-.104	.286
	GENERAL	-.242	.191	.031	.161
	GYEAR	1.000	.017	.080	.029
	ORIGINAL	.017	1.000	.028	.580
	RATIOCIT	.080	.028	1.000	.027
	CLAIMSORIGINAL	.029	.580	.027	1.000
	SECDUPBD	.040	-.025	.032	-.013
	SELFCTUB	-.012	-.055	.060	-.045
Sig. (1-tailed)	logCRECEIVE	.000	.233	.001	.001
	CLAIMS	.114	.000	.317	.000
	CMADE	.002	.000	.000	.000
	GENERAL	.000	.000	.105	.000
	GYEAR	.	.239	.001	.118
	ORIGINAL	.239	.	.123	.000
	RATIOCIT	.001	.123	.	.138
	CLAIMSORIGINAL	.118	.000	.138	.
	SECDUPBD	.051	.155	.096	.304
	SELFCTUB	.312	.012	.008	.032
N	logCRECEIVE	1667	1667	1667	1667
	CLAIMS	1667	1667	1667	1667
	CMADE	1667	1667	1667	1667
	GENERAL	1667	1667	1667	1667
	GYEAR	1667	1667	1667	1667
	ORIGINAL	1667	1667	1667	1667
	RATIOCIT	1667	1667	1667	1667
	CLAIMSORIGINAL	1667	1667	1667	1667
	SECDUPBD	1667	1667	1667	1667
	SELFCTUB	1667	1667	1667	1667

### Correlations

		SECDUPBD	SELFCTUB
Pearson Correlation	logCRECEIVE	-.015	-.006
	CLAIMS	.006	-.007
	CMADE	.013	-.056
	GENERAL	-.058	-.024
	GYEAR	.040	-.012
	ORIGINAL	-.025	-.055
	RATIOCIT	.032	.060
	CLAIMSORIGINAL	-.013	-.045
	SECDUPBD	1.000	.198
	SELFCTUB	.198	1.000
Sig. (1-tailed)	logCRECEIVE	.270	.400
	CLAIMS	.401	.385
	CMADE	.303	.012
	GENERAL	.009	.168
	GYEAR	.051	.312
	ORIGINAL	.155	.012
	RATIOCIT	.096	.008
	CLAIMSORIGINAL	.304	.032
	SECDUPBD	.	.000
	SELFCTUB	.000	.
N	logCRECEIVE	1667	1667
	CLAIMS	1667	1667
	CMADE	1667	1667
	GENERAL	1667	1667
	GYEAR	1667	1667
	ORIGINAL	1667	1667
	RATIOCIT	1667	1667
	CLAIMSORIGINAL	1667	1667
	SECDUPBD	1667	1667
	SELFCTUB	1667	1667

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

Model	Variables Entered	Variables Removed	Method
1	RATIOCIT, CLAIMS, GENERAL, CMADE, GYEAR, ORIGINAL <sup>b</sup>	.	Enter
2	SECDUPBD, SELFCTUB, CLAIMSORIGINAL <sup>b</sup>	.	Enter

a. Dependent Variable: logCRECEIVE

b. All requested variables entered.

### Model Summary<sup>c</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.662 <sup>a</sup>	.438	.436	.6038328130	.438	215.741	6
2	.663 <sup>b</sup>	.440	.437	.6035745331	.001	1.474	3

### Model Summary<sup>c</sup>

Model	Change Statistics		Durbin-Watson
	df2	Sig. F Change	
1	1660	.000	
2	1657	.220	1.991

a. Predictors: (Constant), RATIOCIT, CLAIMS, GENERAL, CMADE, GYEAR, ORIGINAL

b. Predictors: (Constant), RATIOCIT, CLAIMS, GENERAL, CMADE, GYEAR, ORIGINAL, SECDUPBD, SELFCTUB, CLAIMSORIGINAL

c. Dependent Variable: logCRECEIVE

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	471.973	6	78.662	215.741	.000 <sup>b</sup>
	Residual	605.259	1660	.365		
	Total	1077.233	1666			
2	Regression	473.584	9	52.620	144.442	.000 <sup>c</sup>
	Residual	603.649	1657	.364		
	Total	1077.233	1666			

a. Dependent Variable: logCRECEIVE

b. Predictors: (Constant), RATIOCIT, CLAIMS, GENERAL, CMADE, GYEAR, ORIGINAL

c. Predictors: (Constant), RATIOCIT, CLAIMS, GENERAL, CMADE, GYEAR, ORIGINAL, SECDUPBD, SELFCTUB, CLAIMSORIGINAL

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	330.699	28.660		11.539	.000
	CLAIMS	.005	.001	.077	4.096	.000
	CMADE	.001	.001	.021	1.079	.281
	GENERAL	1.744	.059	.569	29.316	.000
	GYEAR	-.166	.014	-.221	-11.536	.000
	ORIGINAL	-.301	.057	-.104	-5.285	.000
	RATIOCIT	.555	.127	.081	4.371	.000
2	(Constant)	331.411	28.663		11.562	.000
	CLAIMS	.008	.002	.127	3.623	.000
	CMADE	.001	.001	.022	1.135	.257
	GENERAL	1.752	.060	.572	29.392	.000
	GYEAR	-.166	.014	-.222	-11.562	.000
	ORIGINAL	-.195	.084	-.067	-2.326	.020
	RATIOCIT	.557	.127	.082	4.378	.000
	CLAIMSORIGINAL	-.007	.004	-.073	-1.703	.089
	SECDUPBD	.053	.044	.023	1.204	.229
	SELFCTUB	-.033	.066	-.010	-.510	.610

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

Model		95.0% Confidence Interval for B		Correlations		
		Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	274.485	386.914			
	CLAIMS	.003	.007	.100	.100	.075
	CMADE	-.001	.003	.018	.026	.020
	GENERAL	1.627	1.861	.612	.584	.539
	GYEAR	-.194	-.138	-.350	-.272	-.212
	ORIGINAL	-.412	-.189	.018	-.129	-.097
	RATIOCIT	.306	.804	.077	.107	.080
2	(Constant)	275.191	387.631			
	CLAIMS	.004	.013	.100	.089	.067
	CMADE	-.001	.004	.018	.028	.021
	GENERAL	1.635	1.868	.612	.585	.541
	GYEAR	-.194	-.138	-.350	-.273	-.213
	ORIGINAL	-.360	-.031	.018	-.057	-.043
	RATIOCIT	.307	.806	.077	.107	.081
	CLAIMSORIGINAL	-.015	.001	.077	-.042	-.031
	SECDUPBD	-.034	.140	-.015	.030	.022
	SELFCTUB	-.162	.095	-.006	-.013	-.009

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

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	CLAIMS	.965	1.036
	CMADE	.879	1.137
	GENERAL	.898	1.114
	GYEAR	.922	1.085
	ORIGINAL	.881	1.135
	RATIOCIT	.975	1.026
2	(Constant)		
	CLAIMS	.275	3.643
	CMADE	.875	1.143
	GENERAL	.894	1.119
	GYEAR	.921	1.086
	ORIGINAL	.405	2.470
	RATIOCIT	.971	1.030
	CLAIMSORIGINAL	.183	5.458
	SECDUPBD	.956	1.046
	SELFCTUB	.953	1.050

a. Dependent Variable: logCRECEIVE

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

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
						Tolerance	VIF
1	CLAIMSORIGINAL	-.073 <sup>b</sup>	-1.702	.089	-.042	.183	5.454
	SECDUPBD	.021 <sup>b</sup>	1.140	.254	.028	.994	1.006
	SELFCTUB	-.004 <sup>b</sup>	-.234	.815	-.006	.992	1.009



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

Model		Collinearity ... Minimum Tolerance
1	CLAIMSORIGINAL	.183
	SECDUPBD	.879
	SELFCTUB	.878

a. Dependent Variable: logCRECEIVE

b. Predictors in the Model: (Constant), RATIOCIT, CLAIMS, GENERAL, CMADE, GYEAR, ORIGINAL

### Coefficient Correlations<sup>a</sup>

Model			RATIOCIT	CLAIMS	GENERAL	CMADE
1	Correlations	RATIOCIT	1.000	-.022	-.050	.127
		CLAIMS	-.022	1.000	-.047	-.142
		GENERAL	-.050	-.047	1.000	-.031
		CMADE	.127	-.142	-.031	1.000
		GYEAR	-.098	-.027	.256	-.083
		ORIGINAL	-.050	-.050	-.179	-.270
	Covariances	RATIOCIT	.016	-3.372E-6	.000	1.842E-5
		CLAIMS	-3.372E-6	1.456E-6	-3.392E-6	-1.965E-7
		GENERAL	.000	-3.392E-6	.004	-2.085E-6
		CMADE	1.842E-5	-1.965E-7	-2.085E-6	1.312E-6
		GYEAR	.000	-4.738E-7	.000	-1.358E-6
		ORIGINAL	.000	-3.459E-6	-.001	-1.758E-5
2	Correlations	RATIOCIT	1.000	.003	-.052	.126
		CLAIMS	.003	1.000	.014	-.025
		GENERAL	-.052	.014	1.000	-.028
		CMADE	.126	-.025	-.028	1.000
		GYEAR	-.098	-.010	.255	-.081
		ORIGINAL	-.023	.603	-.086	-.138
		SECDUPBD	-.023	-.006	.045	-.030
		SELFCTUB	-.053	-.023	.008	.037
		CLAIMSORIGINAL	-.017	-.846	-.046	-.059
	Covariances	RATIOCIT	.016	7.629E-7	.000	1.836E-5
		CLAIMS	7.629E-7	5.115E-6	1.853E-6	-6.583E-8
		GENERAL	.000	1.853E-6	.004	-1.945E-6

### Coefficient Correlations<sup>a</sup>

Model			GYEAR	ORIGINAL	SECDUPBD	SELFCTUB
1	Correlations	RATIOCIT	-.098	-.050		
		CLAIMS	-.027	-.050		
		GENERAL	.256	-.179		
		CMADE	-.083	-.270		
		GYEAR	1.000	-.036		
		ORIGINAL	-.036	1.000		
	Covariances	RATIOCIT	.000	.000		
		CLAIMS	-4.738E-7	-3.459E-6		
		GENERAL	.000	-.001		
		CMADE	-1.358E-6	-1.758E-5		
		GYEAR	.000	-2.969E-5		
		ORIGINAL	-2.969E-5	.003		
2	Correlations	RATIOCIT	-.098	-.023	-.023	-.053
		CLAIMS	-.010	.603	-.006	-.023
		GENERAL	.255	-.086	.045	.008
		CMADE	-.081	-.138	-.030	.037
		GYEAR	1.000	-.020	-.027	.022
		ORIGINAL	-.020	1.000	.007	.006
		SECDUPBD	-.027	.007	1.000	-.196
		SELFCTUB	.022	.006	-.196	1.000
		CLAIMSORIGINAL	-.006	-.735	.004	.026
	Covariances	RATIOCIT	.000	.000	.000	.000
		CLAIMS	-3.202E-7	.000	-6.508E-7	-3.441E-6
		GENERAL	.000	.000	.000	3.128E-5

### Coefficient Correlations<sup>a</sup>

Model			CLAIMSORIGI NAL
1	Correlations	RATIOCIT	
		CLAIMS	
		GENERAL	
		CMADE	
		GYEAR	
		ORIGINAL	
	Covariances	RATIOCIT	
		CLAIMS	
		GENERAL	
		CMADE	
		GYEAR	
		ORIGINAL	
2	Correlations	RATIOCIT	-.017
		CLAIMS	-.846
		GENERAL	-.046
		CMADE	-.059
		GYEAR	-.006
		ORIGINAL	-.735
		SECDUPBD	.004
		SELFCTUB	.026
		CLAIMSORIGINAL	1.000
	Covariances	RATIOCIT	-8.638E-6
		CLAIMS	-7.764E-6
		GENERAL	-1.117E-5

### Coefficient Correlations<sup>a</sup>

Model		RATIOCIT	CLAIMS	GENERAL	CMADE
	CMADE	1.836E-5	-6.583E-8	-1.945E-6	1.318E-6
	GYEAR	.000	-3.202E-7	.000	-1.329E-6
	ORIGINAL	.000	.000	.000	-1.331E-5
	SECDUPBD	.000	-6.508E-7	.000	-1.502E-6
	SELFCTUB	.000	-3.441E-6	3.128E-5	2.748E-6
	CLAIMSORIGINAL	-8.638E-6	-7.764E-6	-1.117E-5	-2.766E-7

### Coefficient Correlations<sup>a</sup>

Model		GYEAR	ORIGINAL	SECDUPBD	SELFCTUB
	CMADE	-1.329E-6	-1.331E-5	-1.502E-6	2.748E-6
	GYEAR	.000	-2.452E-5	-1.690E-5	2.100E-5
	ORIGINAL	-2.452E-5	.007	2.728E-5	3.425E-5
	SECDUPBD	-1.690E-5	2.728E-5	.002	-.001
	SELFCTUB	2.100E-5	3.425E-5	-.001	.004
	CLAIMSORIGINAL	-3.220E-7	.000	7.006E-7	6.794E-6

### Coefficient Correlations<sup>a</sup>

Model		CLAIMSORIGI NAL
	CMADE	-2.766E-7
	GYEAR	-3.220E-7
	ORIGINAL	.000
	SECDUPBD	7.006E-7
	SELFCTUB	6.794E-6
	CLAIMSORIGINAL	1.647E-5

a. Dependent Variable: logCRECEIVE

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

Model	Dimension	Eigenvalue	Condition Index	(Constant)	Variance Proportions		
					CLAIMS	CMADE	GENERAL
1	1	5.307	1.000	.00	.01	.01	.01
	2	.590	3.000	.00	.01	.34	.59
	3	.527	3.174	.00	.03	.49	.29
	4	.331	4.004	.00	.87	.00	.03
	5	.236	4.745	.00	.08	.13	.02
	6	.010	23.218	.00	.00	.02	.00
	7	1.331E-7	6314.809	1.00	.00	.01	.07
2	1	6.410	1.000	.00	.00	.01	.01
	2	.995	2.538	.00	.00	.03	.01
	3	.660	3.116	.00	.01	.05	.36
	4	.591	3.292	.00	.01	.03	.06
	5	.527	3.489	.00	.02	.55	.12
	6	.476	3.668	.00	.00	.23	.33
	7	.287	4.723	.00	.11	.08	.04
	8	.044	12.051	.00	.83	.00	.00
	9	.010	25.677	.00	.01	.02	.00
	10	1.329E-7	6943.382	1.00	.00	.01	.07

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

Model	Dimension	Variance Proportions					
		GYEAR	ORIGINAL	RATIOCIT	CLAIMSORIGI NAL	SECDUPBD	SELFCTUB
1	1	.00	.01	.00			
	2	.00	.00	.00			
	3	.00	.00	.00			
	4	.00	.12	.00			
	5	.00	.87	.00			
	6	.00	.00	.98			
	7	1.00	.00	.01			
2	1	.00	.00	.00	.00	.01	.01
	2	.00	.00	.00	.02	.23	.26
	3	.00	.00	.00	.02	.26	.02
	4	.00	.00	.00	.02	.32	.54
	5	.00	.00	.00	.03	.13	.02
	6	.00	.00	.00	.01	.06	.15
	7	.00	.28	.00	.01	.00	.00
	8	.00	.70	.02	.88	.00	.00
	9	.00	.01	.97	.01	.00	.00
	10	1.00	.00	.01	.00	.00	.00

a. Dependent Variable: logCRECEIVE

### Casewise Diagnostics<sup>a</sup>

Case Number	Std. Residual	logCRECEIVE	Predicted Value	Residual
202	3.893	3.737669618	1.388148577	2.349521042
230	4.030	4.718498871	2.285905307	2.432593565
243	3.429	3.135494216	1.065928601	2.069565615
269	3.349	2.639057330	.6179473310	2.021109999
446	3.445	3.218875825	1.139558356	2.079317469
457	4.013	3.433987204	1.011865851	2.422121354
832	3.125	2.639057330	.7529860767	1.886071253
859	3.563	2.564949357	.4143416468	2.150607711
1058	3.116	1.945910149	.0652676946	1.880642454
1063	4.049	3.637586160	1.193910852	2.443675307
1116	3.836	3.091042453	.7759457718	2.315096682
1220	3.299	3.496507561	1.505310401	1.991197161
1379	3.098	2.484906650	.6152500029	1.869656647
1680	3.725	3.258096538	1.009941980	2.248154558
1744	3.100	2.772588722	.9013721623	1.871216560

a. Dependent Variable: logCRECEIVE

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

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.220429137	2.285905361	.8039315819	.5331641268	1667
Residual	-1.38552821	2.443675280	.0000000000	.6019420219	1667
Std. Predicted Value	-1.921	2.780	.000	1.000	1667
Std. Residual	-2.296	4.049	.000	.997	1667

a. Dependent Variable: logCRECEIVE