

```

COMPUTE ZCE_Index=MEAN(ZIV_3_1,ZIV_3_2,ZIV_3_3,ZIV_3_4,ZIV_3_5).
VARIABLE LABELS ZCE_Index 'Corporate Exclusionary Index'.
EXECUTE.
RELIABILITY
  /VARIABLES=ZIV_3_1 ZIV_3_2 ZIV_3_3 ZIV_3_4 ZIV_3_5
  /SCALE('CE_Index_Standardized') ALL
  /MODEL=ALPHA
  /SUMMARY=TOTAL.

```

## Reliability

### Scale: CE\_Index\_Standardized

#### Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded <sup>a</sup>	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.910	5

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Zscore: Differentiation Between Leaders and Followers	.0000000	11.494	.871	.869
Zscore: Leader Identification	.0000000	11.515	.867	.870
Zscore: Sharing of Authority	.0000000	12.083	.765	.892
Zscore: Emphasis of Authority	.0000000	11.783	.818	.881
Zscore: External Contacts	.0000000	13.330	.558	.933

```

EXECUTE.
FACTOR
/VARIABLES ZIV_3_1 ZIV_3_2 ZIV_3_3 ZIV_3_4 ZIV_3_5
/MISSING LISTWISE
/ANALYSIS ZIV_3_1 ZIV_3_2 ZIV_3_3 ZIV_3_4 ZIV_3_5
/PRINT INITIAL CORRELATION EXTRACTION ROTATION
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=CORRELATION.

```

## Factor Analysis

### Correlation Matrix

		Zscore: Differentiation Between Leaders and Followers	Zscore: Leader Identification	Zscore: Sharing of Authority
Correlation	Zscore: Differentiation Between Leaders and Followers	1.000	.881	.701
	Zscore: Leader Identification	.881	1.000	.699
	Zscore: Sharing of Authority	.701	.699	1.000
	Zscore: Emphasis of Authority	.843	.893	.648
	Zscore: External Contacts	.529	.471	.611

### Correlation Matrix

		Zscore: Emphasis of Authority	Zscore: External Contacts
Correlation	Zscore: Differentiation Between Leaders and Followers	.843	.529
	Zscore: Leader Identification	.893	.471
	Zscore: Sharing of Authority	.648	.611
	Zscore: Emphasis of Authority	1.000	.425
	Zscore: External Contacts	.425	1.000

### Communalities

	Initial	Extraction
Zscore: Differentiation Between Leaders and Followers	1.000	.867
Zscore: Leader Identification	1.000	.869
Zscore: Sharing of Authority	1.000	.716
Zscore: Emphasis of Authority	1.000	.813
Zscore: External Contacts	1.000	.454

Extraction Method: Principal Component Analysis.

### Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.719	74.374	74.374	3.719	74.374	74.374
2	.721	14.423	88.797			
3	.316	6.318	95.115			
4	.148	2.962	98.077			
5	.096	1.923	100.000			

Extraction Method: Principal Component Analysis.

### Component Matrix<sup>a</sup>

	Component 1
Zscore: Differentiation Between Leaders and Followers	.931
Zscore: Leader Identification	.932
Zscore: Sharing of Authority	.846
Zscore: Emphasis of Authority	.902
Zscore: External Contacts	.674

Extraction Method: Principal Component  
Analysis.

a. 1 components extracted.

### Rotated Component Matrix<sup>a</sup>

a. Only one component was extracted. The solution cannot be rotated.

```
COMPUTE ZTL_Full_Index=MEAN(ZIV_2_1,ZIV_2_2,ZIV_2_3,ZIV_2_4,ZIV_2_5,ZIV_2_6).  
VARIABLE LABELS ZTL_Full_Index 'Looseness-Tightness Full Index'.  
EXECUTE.  
RELIABILITY  
  /VARIABLES=ZIV_2_1 ZIV_2_2 ZIV_2_3 ZIV_2_4 ZIV_2_5 ZIV_2_6  
  /SCALE('TL_Index_Standardized') ALL  
  /MODEL=ALPHA  
  /SUMMARY=TOTAL.
```

### Reliability

## Scale: TL\_Index\_Standardized

### Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded <sup>a</sup>	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.676	6

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Zscore: Community Integration	.0000000	11.676	.154	.715
Zscore: Prominent Community Ceremonials	.0000000	9.035	.615	.558
Zscore: Standardized Finewear Ceramics	.0000000	9.003	.621	.556
Zscore: Standardized Living Dwellings	.0000000	12.165	.081	.736
Zscore: Standardized Public Structures	.0000000	9.560	.513	.596
Zscore: Standardized Ritual Structures	.0000000	9.484	.527	.591

EXECUTE .

FACTOR

```
/VARIABLES ZIV_2_1 ZIV_2_2 ZIV_2_3 ZIV_2_4 ZIV_2_5 ZIV_2_6  
/MISSING LISTWISE  
/ANALYSIS ZIV_2_1 ZIV_2_2 ZIV_2_3 ZIV_2_4 ZIV_2_5 ZIV_2_6  
/PRINT INITIAL CORRELATION EXTRACTION ROTATION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/CRITERIA ITERATE(25)
```

/ROTATION VARIMAX  
 /METHOD=CORRELATION.

## Factor Analysis

### Correlation Matrix

		Zscore: Community Integration	Zscore: Prominent Community Ceremonials	Zscore: Standardized Finewear Ceramics
Correlation	Zscore: Community Integration	1.000	.130	.270
	Zscore: Prominent Community Ceremonials	.130	1.000	.553
	Zscore: Standardized Finewear Ceramics	.270	.553	1.000
	Zscore: Standardized Living Dwellings	-.124	.347	-.064
	Zscore: Standardized Public Structires	.261	.352	.494
	Zscore: Standardized Ritual Structures	-.009	.465	.612

### Correlation Matrix

		Zscore: Standardized Living Dwellings	Zscore: Standardized Public Structires	Zscore: Standardized Ritual Structures
Correlation	Zscore: Community Integration	-.124	.261	-.009
	Zscore: Prominent Community Ceremonials	.347	.352	.465
	Zscore: Standardized Finewear Ceramics	-.064	.494	.612
	Zscore: Standardized Living Dwellings	1.000	.023	.101
	Zscore: Standardized Public Structires	.023	1.000	.455
	Zscore: Standardized Ritual Structures	.101	.455	1.000

### Communalities

	Initial	Extraction
Zscore: Community Integration	1.000	.482
Zscore: Prominent Community Ceremonials	1.000	.694
Zscore: Standardized Finewear Ceramics	1.000	.760
Zscore: Standardized Living Dwellings	1.000	.697
Zscore: Standardized Public Structures	1.000	.566
Zscore: Standardized Ritual Structures	1.000	.627

Extraction Method: Principal Component Analysis.

### Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.561	42.686	42.686	2.561	42.686	42.686
2	1.264	21.073	63.759	1.264	21.073	63.759
3	.899	14.980	78.739			
4	.595	9.911	88.650			
5	.406	6.774	95.424			
6	.275	4.576	100.000			

### Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.557	42.617	42.617
2	1.269	21.143	63.759
3			
4			
5			
6			

Extraction Method: Principal Component Analysis.

### Component Matrix<sup>a</sup>

	Component	
	1	2
Zscore: Community Integration	.313	-.619
Zscore: Prominent Community Ceremonials	.761	.340
Zscore: Standardized Finewear Ceramics	.851	-.189
Zscore: Standardized Living Dwellings	.170	.817
Zscore: Standardized Public Structures	.723	-.207
Zscore: Standardized Ritual Structures	.780	.137

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

### Rotated Component Matrix<sup>a</sup>

	Component	
	1	2
Zscore: Community Integration	.278	-.636
Zscore: Prominent Community Ceremonials	.779	.296
Zscore: Standardized Finewear Ceramics	.839	-.237
Zscore: Standardized Living Dwellings	.216	.806
Zscore: Standardized Public Structures	.710	-.248
Zscore: Standardized Ritual Structures	.787	.093

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.



## Component Transformation Matrix

Component	1	2
1	.998	-.057
2	.057	.998

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

```
COMPUTE ZDV_Index=MEAN(ZDV_1rec,ZDV_2rec,ZDV_3rec,ZDV_4_1rec,ZDV_4_2rec,ZDV_4_3rec).
VARIABLE LABELS ZDV_Index 'Change Index'.
EXECUTE.
RELIABILITY
  /VARIABLES=ZDV_1rec ZDV_2rec ZDV_3rec ZDV_4_1rec ZDV_4_2rec ZDV_4_3rec
  /SCALE('DV_Index_Standardized') ALL
  /MODEL=ALPHA
  /SUMMARY=TOTAL.
```

## Reliability

### Scale: DV\_Index\_Standardized

#### Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded <sup>a</sup>	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.774	6

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Zscore: DV_1 Recoded	.0000000	12.036	.558	.731
Zscore: DV_2 Recoded	.0000000	12.703	.450	.758
Zscore: DV_3 Recoded	.0000000	13.476	.332	.786
Zscore: DV_4_1 Recoded	.0000000	10.737	.789	.668
Zscore: DV_4_2 Recoded	.0000000	12.833	.430	.763
Zscore: DV_4_3 Recoded	.0000000	11.857	.589	.723

EXECUTE .

FACTOR

```

/VARIABLES ZDV_1rec ZDV_2rec ZDV_3rec ZDV_4_1rec ZDV_4_2rec ZDV_4_3rec
/MISSING LISTWISE
/ANALYSIS ZDV_1rec ZDV_2rec ZDV_3rec ZDV_4_1rec ZDV_4_2rec ZDV_4_3rec
/PRINT INITIAL CORRELATION EXTRACTION ROTATION
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=CORRELATION.

```

### Factor Analysis

#### Correlation Matrix

		Zscore: DV_1 Recoded	Zscore: DV_2 Recoded	Zscore: DV_3 Recoded
Correlation	Zscore: DV_1 Recoded	1.000	.453	.131
	Zscore: DV_2 Recoded	.453	1.000	.739
	Zscore: DV_3 Recoded	.131	.739	1.000
	Zscore: DV_4_1 Recoded	.580	.347	.289
	Zscore: DV_4_2 Recoded	.384	-.067	-.041
	Zscore: DV_4_3 Recoded	.390	.132	.100

### Correlation Matrix

		Zscore: DV_4_1 Recoded	Zscore: DV_4_2 Recoded	Zscore: DV_4_3 Recoded
Correlation	Zscore: DV_1 Recoded	.580	.384	.390
	Zscore: DV_2 Recoded	.347	-.067	.132
	Zscore: DV_3 Recoded	.289	-.041	.100
	Zscore: DV_4_1 Recoded	1.000	.614	.757
	Zscore: DV_4_2 Recoded	.614	1.000	.649
	Zscore: DV_4_3 Recoded	.757	.649	1.000

### Communalities

	Initial	Extraction
Zscore: DV_1 Recoded	1.000	.533
Zscore: DV_2 Recoded	1.000	.904
Zscore: DV_3 Recoded	1.000	.787
Zscore: DV_4_1 Recoded	1.000	.848
Zscore: DV_4_2 Recoded	1.000	.767
Zscore: DV_4_3 Recoded	1.000	.768

Extraction Method: Principal Component Analysis.

### Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.916	48.604	48.604	2.916	48.604	48.604
2	1.690	28.169	76.773	1.690	28.169	76.773
3	.688	11.472	88.245			
4	.355	5.915	94.160			
5	.203	3.387	97.547			
6	.147	2.453	100.000			

### Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.672	44.530	44.530
2	1.935	32.243	76.773
3			
4			
5			
6			

Extraction Method: Principal Component Analysis.

### Component Matrix<sup>a</sup>

	Component	
	1	2
Zscore: DV_1 Recoded	.728	.048
Zscore: DV_2 Recoded	.530	.790
Zscore: DV_3 Recoded	.418	.782
Zscore: DV_4_1 Recoded	.912	-.125
Zscore: DV_4_2 Recoded	.681	-.551
Zscore: DV_4_3 Recoded	.797	-.365

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

## Rotated Component Matrix<sup>a</sup>

	Component	
	1	2
Zscore: DV_1 Recoded	.630	.368
Zscore: DV_2 Recoded	.121	.943
Zscore: DV_3 Recoded	.025	.887
Zscore: DV_4_1 Recoded	.872	.295
Zscore: DV_4_2 Recoded	.855	-.189
Zscore: DV_4_3 Recoded	.876	.029

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

## Component Transformation Matrix

Component	1	2
1	.895	.446
2	-.446	.895

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

```
USE ALL.
COMPUTE filter_$=(SigTempChng = 1).
VARIABLE LABELS filter_$ 'SigTempChng = 1 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
CORRELATIONS
  /VARIABLES=ZDV_1rec ZDV_2rec ZDV_3rec ZDV_4_1rec ZDV_4_2rec ZDV_4_3rec ZTL_F
ull_Index ZCE_Index
  ZDV_Index
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE.
```

## Correlations

[DataSet1] C:\Users\peregrip\OneDrive - Lawrence University\ARO\_Files\Data\ARO-DA.sav

		Looseness-Tightness Full Index	Corporate Exclusionary Index
Zscore: DV_1 Recoded	Pearson Correlation	-.096	-.034
	Sig. (2-tailed)	.805	.931
	N	9	9
Zscore: DV_2 Recoded	Pearson Correlation	.525	.351
	Sig. (2-tailed)	.147	.354
	N	9	9
Zscore: DV_3 Recoded	Pearson Correlation	.252	.305
	Sig. (2-tailed)	.512	.424
	N	9	9
Zscore: DV_4_1 Recoded	Pearson Correlation	.036	.219
	Sig. (2-tailed)	.927	.571
	N	9	9
Zscore: DV_4_2 Recoded	Pearson Correlation	-.069	.154
	Sig. (2-tailed)	.859	.693
	N	9	9
Zscore: DV_4_3 Recoded	Pearson Correlation	.466	.661
	Sig. (2-tailed)	.207	.052
	N	9	9
Looseness-Tightness Full Index	Pearson Correlation	1	.883
	Sig. (2-tailed)		.002
	N	9	9
Corporate Exclusionary Index	Pearson Correlation	.883	1
	Sig. (2-tailed)	.002	
	N	9	9
Change Index	Pearson Correlation	.315	.452
	Sig. (2-tailed)	.408	.222
	N	9	9

BAYES CORRELATION  
/MISSING SCOPE=PAIRWISE

```

/CRITERIA CILEVEL=95 SEED=RANDOM MCSAMPLES=1000000 TOL=0.0001 MAXITER=2000 P
OSTSAMPLES=1000000
/INFERENCE VARIABLES=ZTL_Full_Index ZCE_Index ZDV_Index ANALYSIS=BOTH MAXPLO
TS=10 CVALUE=0
/ESTBF TYPE=JZS.

```

## Bayesian Correlation

### Bayes Factor Inference on Pairwise Correlations<sup>a</sup>

		Looseness- Tightness Full Index	Corporate Exclusionary Index	Change Index
Looseness-Tightness Full Index	Pearson Correlation	1	.883	.315
	Bayes Factor		.030	2.886
	N	9	9	9
Corporate Exclusionary Index	Pearson Correlation	.883	1	.452
	Bayes Factor	.030		1.903
	N	9	9	9
Change Index	Pearson Correlation	.315	.452	1
	Bayes Factor	2.886	1.903	
	N	9	9	9

a. Bayes factor: Null versus alternative hypothesis.

## Posterior Distribution Characterization for Pairwise Correlations<sup>a</sup>

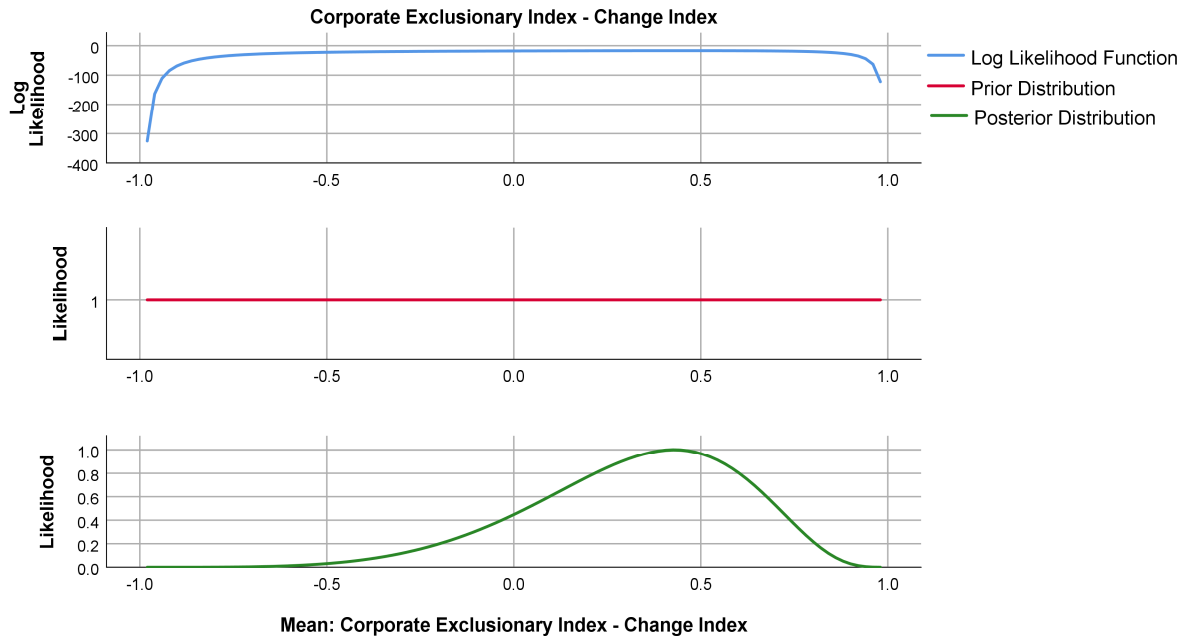
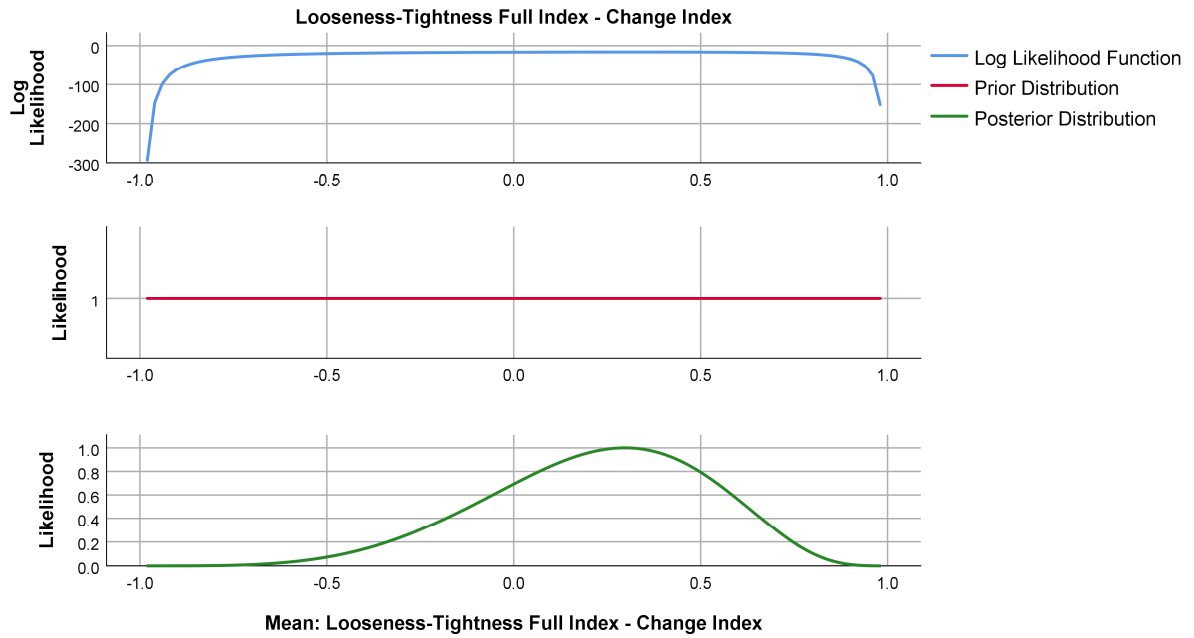
			Looseness-Tightness Full Index	Corporate Exclusionary Index
Looseness-Tightness Full Index	Posterior	Mode		.870
		Mean		.783
		Variance		.019
	95% Credible Interval	Lower Bound		.506
		Upper Bound		.974
	N		9	9
Corporate Exclusionary Index	Posterior	Mode	.870	
		Mean	.783	
		Variance	.019	
	95% Credible Interval	Lower Bound	.506	
		Upper Bound	.974	
	N		9	9
Change Index	Posterior	Mode	.297	.429
		Mean	.215	.320
		Variance	.079	.073
	95% Credible Interval	Lower Bound	-.333	-.211
		Upper Bound	.726	.800
	N		9	9



## Posterior Distribution Characterization for Pairwise Correlations<sup>a</sup>

			Change Index
Looseness-Tightness Full Index	Posterior	Mode	.297
		Mean	.215
		Variance	.079
	95% Credible Interval	Lower Bound	-.333
		Upper Bound	.726
	N		9
Corporate Exclusionary Index	Posterior	Mode	.429
		Mean	.320
		Variance	.073
	95% Credible Interval	Lower Bound	-.211
		Upper Bound	.800
	N		9
Change Index	Posterior	Mode	
		Mean	
		Variance	
	95% Credible Interval	Lower Bound	
		Upper Bound	
	N		9

a. The analyses assume reference priors ( $c = 0$ ).



FILTER OFF.  
USE ALL.  
EXECUTE.  
USE ALL.

```

COMPUTE filter_$=(SigTempChng = 2).
VARIABLE LABELS filter_$ 'SigTempChng = 2 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
CORRELATIONS
  /VARIABLES=ZDV_1rec ZDV_2rec ZDV_3rec ZDV_4_1rec ZDV_4_2rec ZDV_4_3rec ZTL_F
ull_Index ZCE_Index
  ZDV_Index
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE.

```

## Correlations

```

BAYES CORRELATION
  /MISSING SCOPE=PAIRWISE
  /CRITERIA CILEVEL=95 SEED=RANDOM MCSAMPLES=1000000 TOL=0.0001 MAXITER=2000 P
OSTSAMPLES=1000000
  /INFERENCE VARIABLES=ZTL_Full_Index ZCE_Index ZDV_Index ANALYSIS=BOTH MAXPLO
TS=10 CVALUE=0
  /ESTBF TYPE=JZS.

```

## Bayesian Correlation

### Bayes Factor Inference on Pairwise Correlations<sup>a</sup>

		Looseness- Tightness Full Index	Corporate Exclusionary Index	Change Index
Looseness-Tightness Full Index	Pearson Correlation	1	.821	.305
	Bayes Factor		.039	2.936
	N	11	11	11
Corporate Exclusionary Index	Pearson Correlation	.821	1	.495
	Bayes Factor	.039		1.332
	N	11	11	11
Change Index	Pearson Correlation	.305	.495	1
	Bayes Factor	2.936	1.332	
	N	11	11	11

a. Bayes factor: Null versus alternative hypothesis.

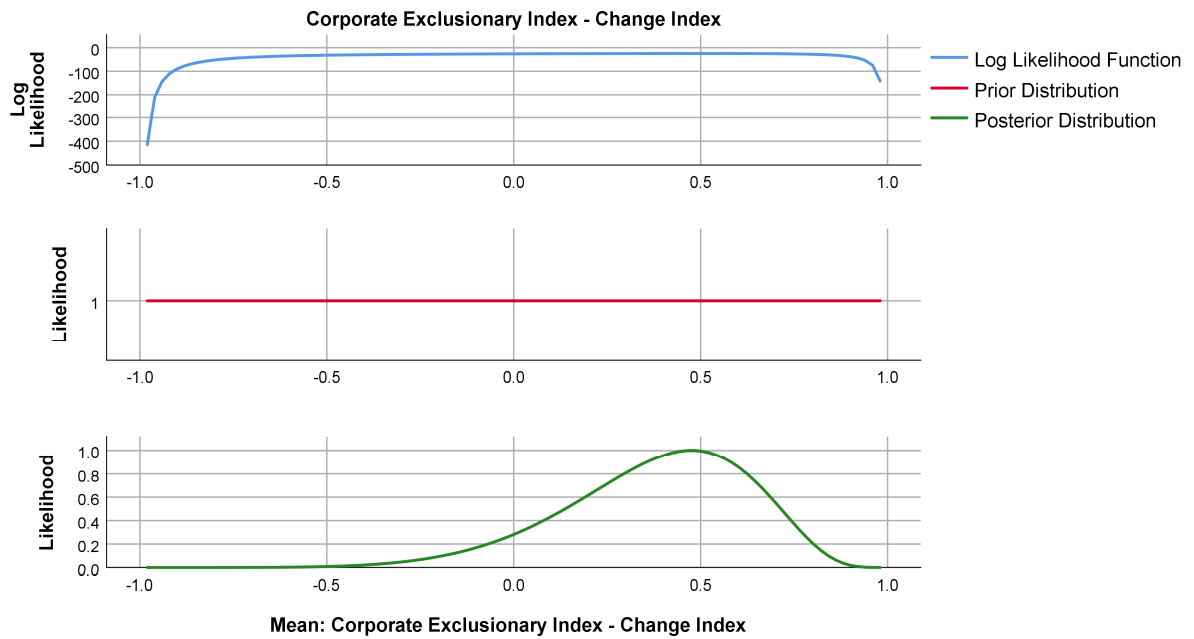
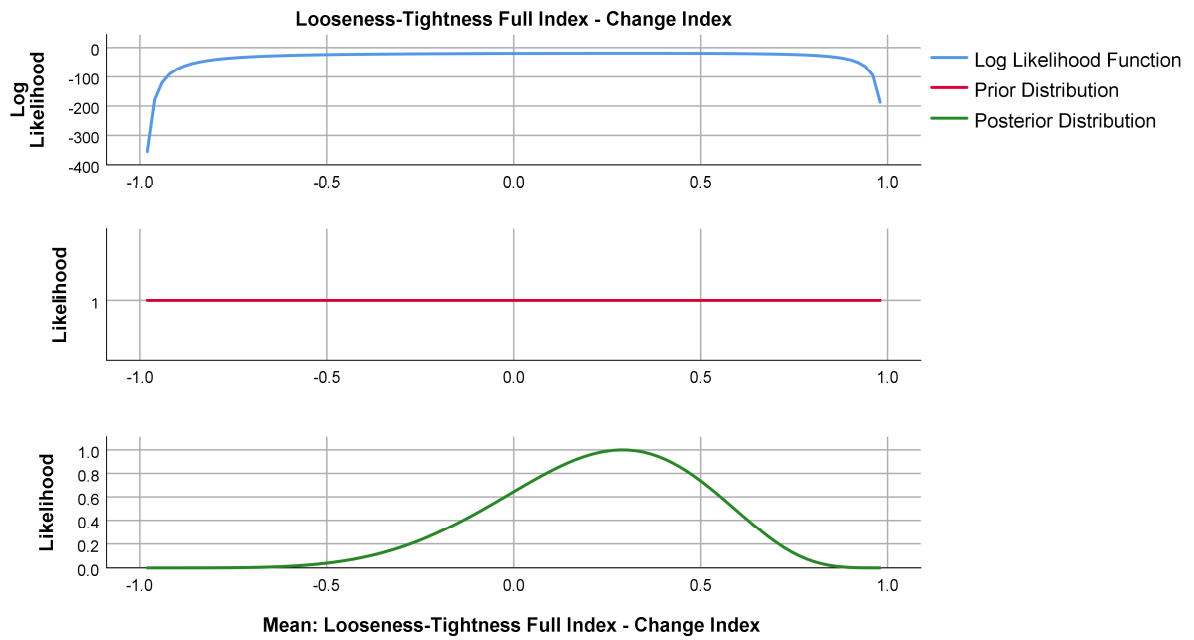
### Posterior Distribution Characterization for Pairwise Correlations<sup>a</sup>

			Looseness-Tightness Full Index	Corporate Exclusionary Index
Looseness-Tightness Full Index	Posterior	Mode		.806
		Mean		.719
		Variance		.022
	95% Credible Interval	Lower Bound		.420
		Upper Bound		.947
	N			11
Corporate Exclusionary Index	Posterior	Mode	.806	
		Mean	.719	
		Variance	.022	
	95% Credible Interval	Lower Bound	.420	
		Upper Bound	.947	
	N			11
Change Index	Posterior	Mode	.291	.476
		Mean	.224	.380
		Variance	.067	.057
	95% Credible Interval	Lower Bound	-.280	-.092
		Upper Bound	.701	.804
	N			11

## Posterior Distribution Characterization for Pairwise Correlations<sup>a</sup>

			Change Index
Looseness-Tightness Full Index	Posterior	Mode	.291
		Mean	.224
		Variance	.067
	95% Credible Interval	Lower Bound	-.280
		Upper Bound	.701
	N		11
Corporate Exclusionary Index	Posterior	Mode	.476
		Mean	.380
		Variance	.057
	95% Credible Interval	Lower Bound	-.092
		Upper Bound	.804
	N		11
Change Index	Posterior	Mode	
		Mean	
		Variance	
	95% Credible Interval	Lower Bound	
		Upper Bound	
	N		11

a. The analyses assume reference priors ( $c = 0$ ).



**Partial Corr**

## Correlations

Control Variables			Corporate Exclusionary Index	Looseness- Tightness Full Index
Political Integration	Zscore: DV_1 Recoded	Correlation	.547	.306
		Significance (1-tailed)	.008	.101
		df	17	17
	Zscore: DV_2 Recoded	Correlation	.099	.233
		Significance (1-tailed)	.343	.169
		df	17	17
	Zscore: DV_3 Recoded	Correlation	-.062	-.149
		Significance (1-tailed)	.400	.271
		df	17	17
	Zscore: DV_4_1 Recoded	Correlation	.460	.318
		Significance (1-tailed)	.024	.092
		df	17	17
	Zscore: DV_4_2 Recoded	Correlation	.554	.252
		Significance (1-tailed)	.007	.149
		df	17	17
	Zscore: DV_4_3 Recoded	Correlation	.584	.495
		Significance (1-tailed)	.004	.016
		df	17	17
Corporate Exclusionary Index		Correlation	1.000	.515
		Significance (1-tailed)	.	.012
		df	0	17
Looseness-Tightness Full Index		Correlation	.515	1.000
		Significance (1-tailed)	.012	.
		df	17	0
Change Index		Correlation	.537	.360
		Significance (1-tailed)	.009	.065
		df	17	17

CORRELATIONS

```

/VARIABLES=ZDV_1rec ZDV_2rec ZDV_3rec ZDV_4_1rec ZDV_4_2rec ZDV_4_3rec ZTL_F
ull_Index ZCE_Index
      ZDV_Index
/PRINT=ONETAILED NOSIG
/MISSING=PAIRWISE.

```

## Correlations

### Correlations

		Looseness- Tightness Full Index	Corporate Exclusionary Index
Zscore: DV_1 Recoded	Pearson Correlation	.223	.342
	Sig. (1-tailed)	.173	.070
	N	20	20
Zscore: DV_2 Recoded	Pearson Correlation	.415	.353
	Sig. (1-tailed)	.034	.063
	N	20	20
Zscore: DV_3 Recoded	Pearson Correlation	.297	.415
	Sig. (1-tailed)	.102	.034
	N	20	20
Zscore: DV_4_1 Recoded	Pearson Correlation	.190	.239
	Sig. (1-tailed)	.211	.155
	N	20	20
Zscore: DV_4_2 Recoded	Pearson Correlation	.087	.235
	Sig. (1-tailed)	.357	.160
	N	20	20
Zscore: DV_4_3 Recoded	Pearson Correlation	.326	.322
	Sig. (1-tailed)	.081	.083
	N	20	20
Looseness-Tightness Full Index	Pearson Correlation	1	.759
	Sig. (1-tailed)		.000
	N	20	20
Corporate Exclusionary Index	Pearson Correlation	.759	1
	Sig. (1-tailed)	.000	
	N	20	20
Change Index	Pearson Correlation	.374	.463
	Sig. (1-tailed)	.052	.020
	N	20	20

GET

FILE='C:\Users\peregrip\OneDrive - Lawrence University\ARO\_Files\Data\ARO-DA  
.sav'.

DATASET NAME DataSet1 WINDOW=FRONT.

GRAPH



```

/SCATTERPLOT (BIVAR)=ZDV_Index WITH ZTL_Full_Index
/MISSING=LISTWISE.

```

## Graph

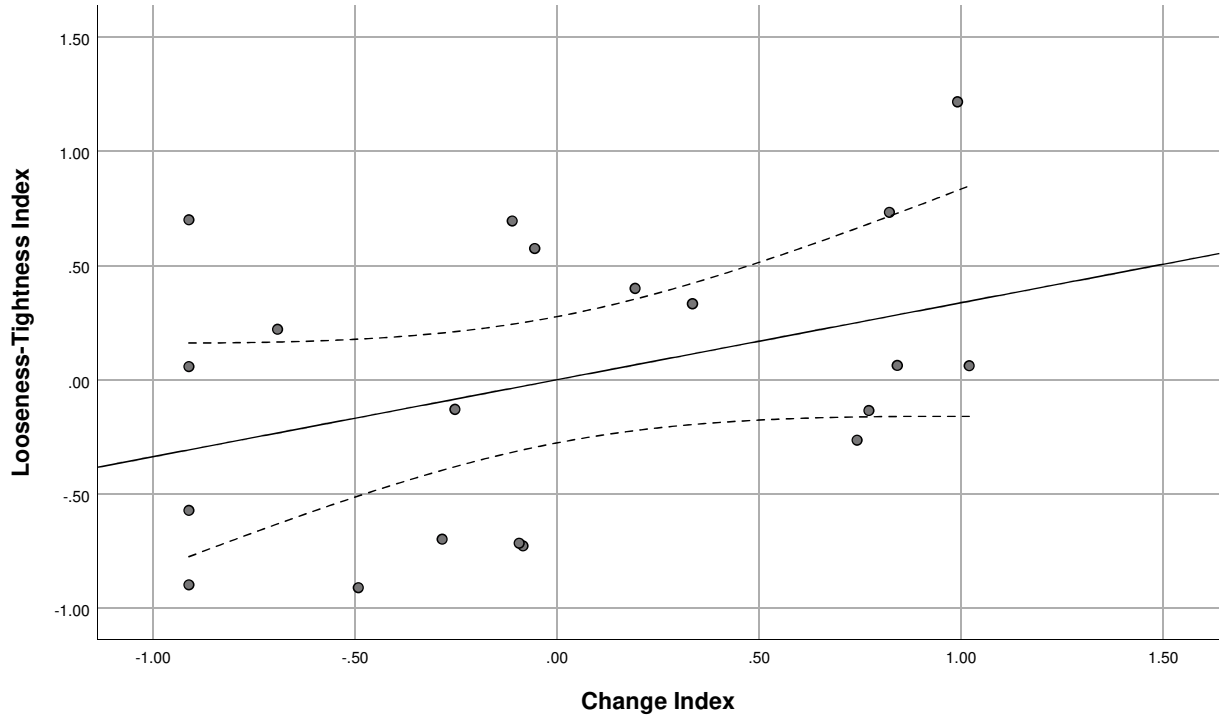
### Notes

Output Created		11-FEB-2020 14:55:20
Comments		
Input	Data	C: \Users\peregrip\OneDrive - Lawrence University\ARO_Files\Dat a\ARO-DA.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	20
Syntax		GRAPH /SCATTERPLOT(BIVAR) =ZDV_Index WITH ZTL_Full_Index /MISSING=LISTWISE.
Resources	Processor Time	00:00:01.49
	Elapsed Time	00:00:00.97

```

[DataSet1] C:\Users\peregrip\OneDrive - Lawrence University\ARO_Files\Data\ARO-DA.sav

```



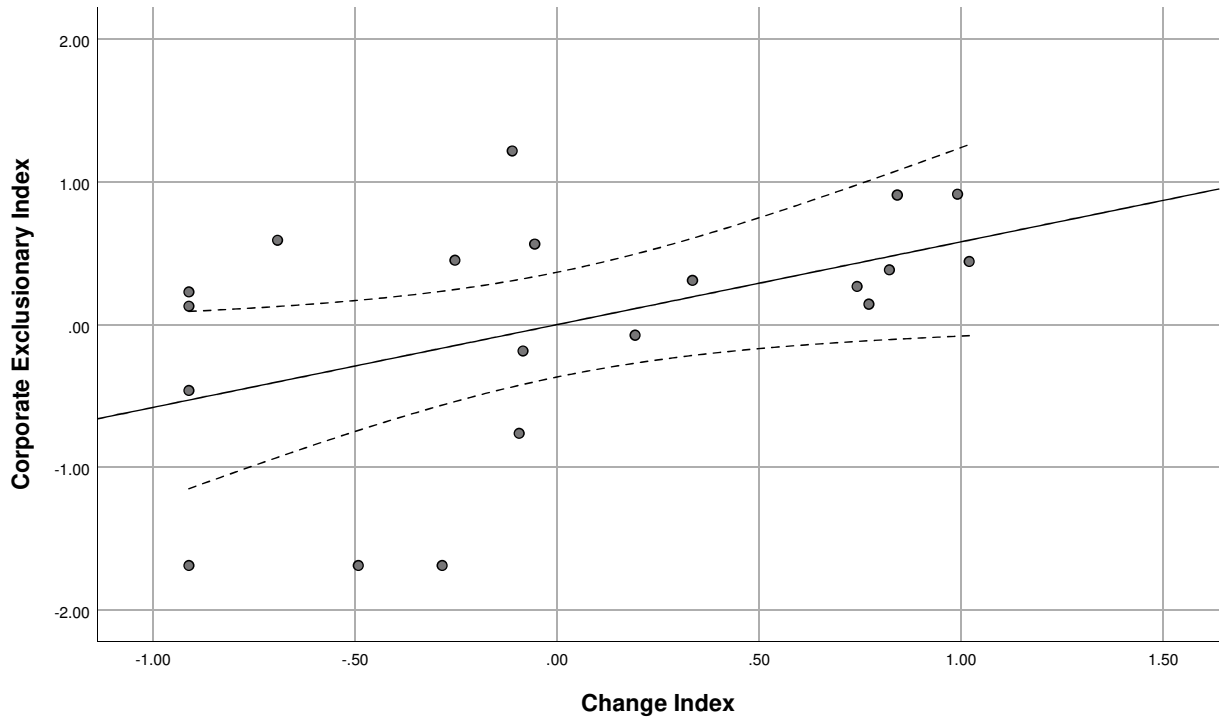
GRAPH

```

/SCATTERPLOT (BIVAR)=ZDV_Index WITH ZCE_Index
/MISSING=LISTWISE.

```

## Graph



CORRELATIONS

```

/VARIABLES=ZCE_Index ZTL_Full_Index ZDV_Index DV_1rec DV_2rec DV_3rec DV_4_1
rec DV_4_2rec
DV_4_3rec
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.

```

**Correlations**

## Correlations

		Corporate Exclusionary Index	Looseness- Tightness Full Index
Corporate Exclusionary Index	Pearson Correlation	1	.759
	Sig. (2-tailed)		.000
	N	20	20
Looseness-Tightness Full Index	Pearson Correlation	.759	1
	Sig. (2-tailed)	.000	
	N	20	20
Change Index	Pearson Correlation	.463	.374
	Sig. (2-tailed)	.040	.104
	N	20	20
DV_1 Recoded	Pearson Correlation	.342	.223
	Sig. (2-tailed)	.140	.346
	N	20	20
DV_2 Recoded	Pearson Correlation	.353	.415
	Sig. (2-tailed)	.127	.069
	N	20	20
DV_3 Recoded	Pearson Correlation	.415	.297
	Sig. (2-tailed)	.069	.204
	N	20	20
DV_4_1 Recoded	Pearson Correlation	.239	.190
	Sig. (2-tailed)	.311	.421
	N	20	20
DV_4_2 Recoded	Pearson Correlation	.235	.087
	Sig. (2-tailed)	.320	.714
	N	20	20
DV_4_3 Recoded	Pearson Correlation	.322	.326
	Sig. (2-tailed)	.167	.161
	N	20	20

BAYES CORRELATION

/MISSING SCOPE=PAIRWISE

/CRITERIA CILEVEL=95 SEED=RANDOM MCSAMPLES=1000000 TOL=0.0001 MAXITER=2000 P  
OSTSAMPLES=1000000

/INFERENCE VARIABLES=ZCE\_Index ZTL\_Full\_Index ZDV\_Index ANALYSIS=BOTH MAXPLO  
TS=10 CVALUE=0

/ESTBF TYPE=JZS.

## Bayesian Correlation

### Bayes Factor Inference on Pairwise Correlations<sup>a</sup>

		Corporate Exclusionary Index	Looseness-Tightness Full Index	Change Index
Corporate Exclusionary Index	Pearson Correlation	1	.759	.463
	Bayes Factor		.003	.716
	N	20	20	20
Looseness-Tightness Full Index	Pearson Correlation	.759	1	.374
	Bayes Factor	.003		1.578
	N	20	20	20
Change Index	Pearson Correlation	.463	.374	1
	Bayes Factor	.716	1.578	
	N	20	20	20

a. Bayes factor: Null versus alternative hypothesis.

### Posterior Distribution Characterization for Pairwise Correlations<sup>a</sup>

			Corporate Exclusionary Index	Looseness-Tightness Full Index
Corporate Exclusionary Index	Posterior	Mode		.750
		Mean		.698
		Variance		.013
	95% Credible Interval	Lower Bound		.467
		Upper Bound		.892
	N		20	20
Looseness-Tightness Full Index	Posterior	Mode	.750	
		Mean	.698	
		Variance	.013	
	95% Credible Interval	Lower Bound	.467	
		Upper Bound	.892	
	N		20	20
Change Index	Posterior	Mode	.454	.365
		Mean	.401	.320
		Variance	.032	.036
	95% Credible Interval	Lower Bound	.047	-.057
		Upper Bound	.730	.673

**Posterior Distribution Characterization for Pairwise Correlations<sup>a</sup>**

			Change Index
Corporate Exclusionary Index	Posterior	Mode	.454
		Mean	.401
		Variance	.032
	95% Credible Interval	Lower Bound	.047
		Upper Bound	.730
	N		20
Looseness-Tightness Full Index	Posterior	Mode	.365
		Mean	.320
		Variance	.036
	95% Credible Interval	Lower Bound	-.057
		Upper Bound	.673
	N		20
Change Index	Posterior	Mode	
		Mean	
		Variance	
	95% Credible Interval	Lower Bound	
		Upper Bound	

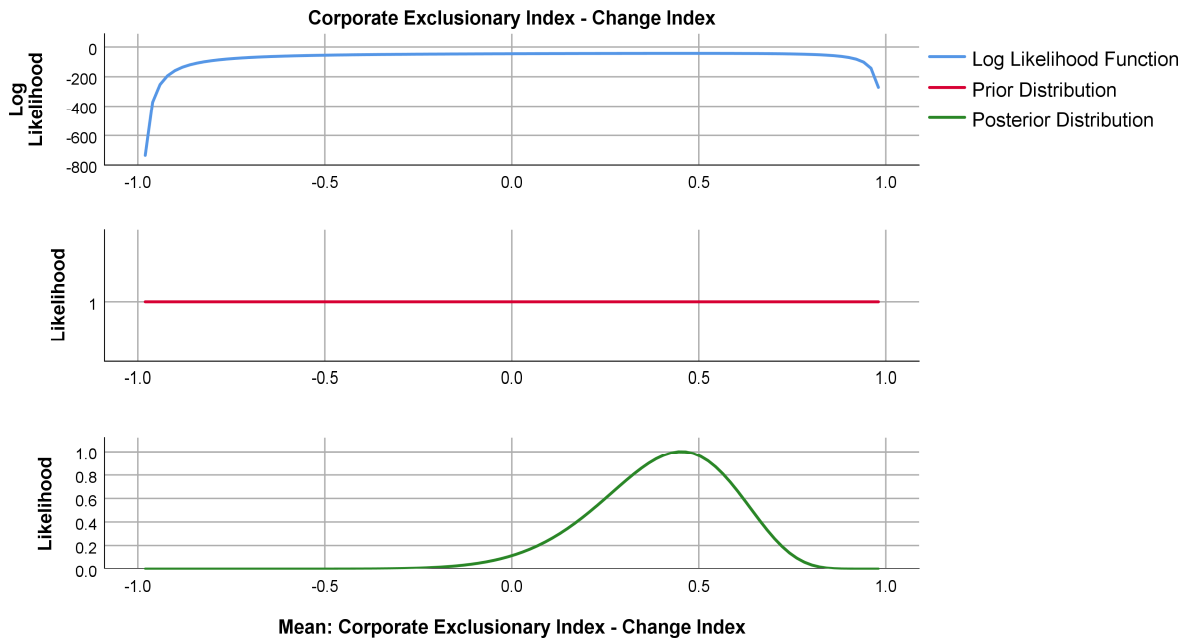
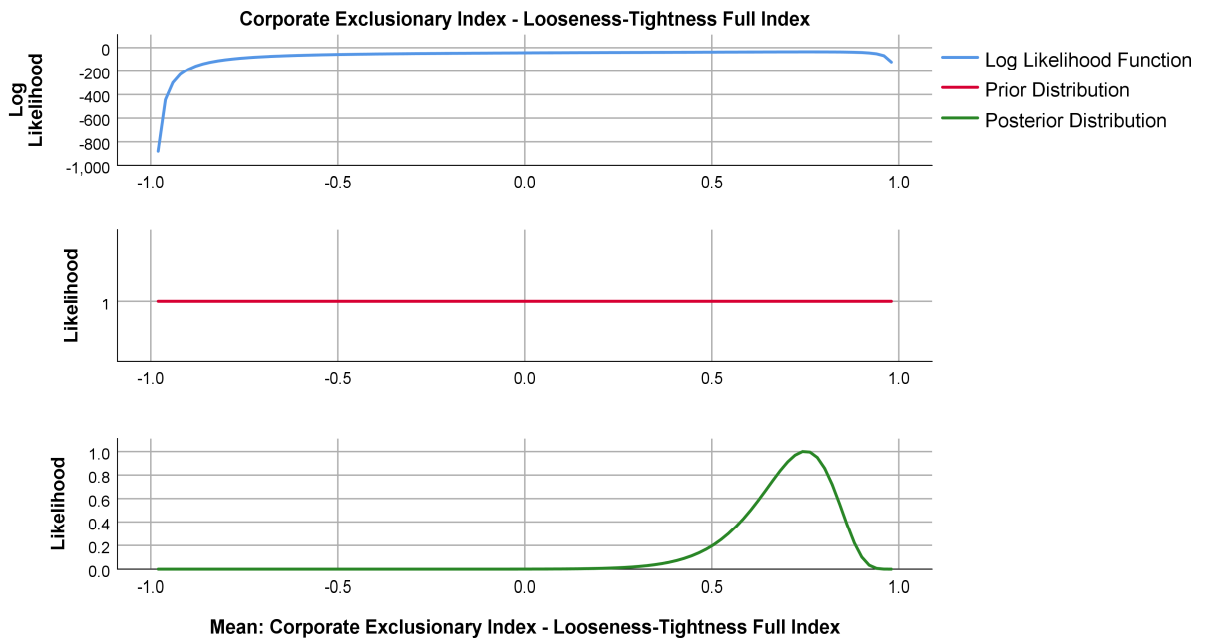
**Posterior Distribution Characterization for Pairwise Correlations<sup>a</sup>**

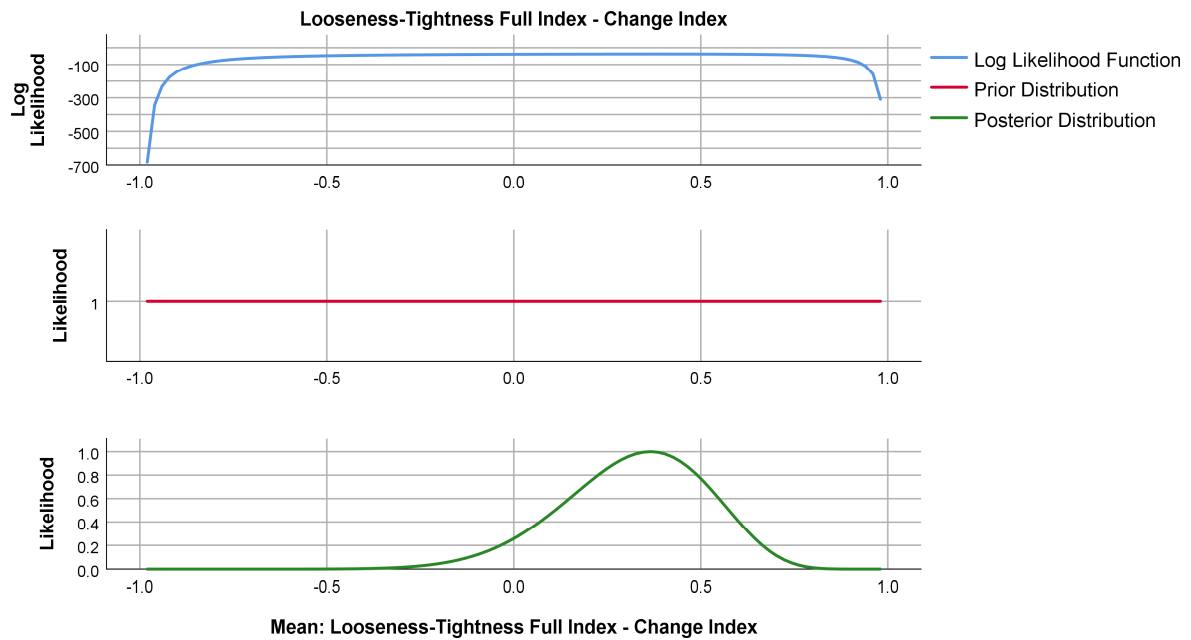
	Corporate Exclusionary Index	Looseness-Tightness Full Index
N	20	20

**Posterior Distribution Characterization for Pairwise Correlations<sup>a</sup>**

	Change Index
N	20

a. The analyses assume reference priors ( $c = 0$ ).





```

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT ZDV_Index
  /METHOD=ENTER ZTL_Full_Index ZCE_Index
  /RESIDUALS DURBIN.

```

## Regression

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

Model	Variables Entered	Variables Removed	Method
1	Corporate Exclusionary Index, Looseness-Tightness Full Index <sup>b</sup>	.	Enter

a. Dependent Variable: Change Index

b. All requested variables entered.



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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.465 <sup>a</sup>	.216	.124	.64164	.216	2.339	2

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

Model	Change Statistics		Durbin-Watson
	df2	Sig. F Change	
1	17	.127	1.731

a. Predictors: (Constant), Corporate Exclusionary Index, Looseness-Tightness Full Index

b. Dependent Variable: Change Index

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.926	2	.963	2.339	.127 <sup>b</sup>
	Residual	6.999	17	.412		
	Total	8.925	19			

a. Dependent Variable: Change Index

b. Predictors: (Constant), Corporate Exclusionary Index, Looseness-Tightness Full Index

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.049E-17	.143		.000	1.000
	Looseness-Tightness Full Index	.058	.366	.052	.159	.876
	Corporate Exclusionary Index	.338	.264	.423	1.283	.217

a. Dependent Variable: Change Index

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

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.6239	.4520	.0000	.31838	20
Residual	-1.02993	.86667	.00000	.60693	20
Std. Predicted Value	-1.960	1.420	.000	1.000	20
Std. Residual	-1.605	1.351	.000	.946	20

a. Dependent Variable: Change Index

## Bayesian Regression

### ANOVA<sup>a,b</sup>

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.926	2	.963	2.339	.127
Residual	6.999	17	.412		
Total	8.925	19			

a. Dependent Variable: Change Index

b. Model: (Intercept), Corporate Exclusionary Index, Looseness-Tightness Full Index

### Bayes Factor Model Summary<sup>a,b</sup>

Bayes Factor <sup>c</sup>	R	R Square	Adjusted R Square	Std. Error of the Estimate
.337	.465	.216	.124	.6416

a. Method: JZS

b. Model: (Intercept), Corporate Exclusionary Index, Looseness-Tightness Full Index

c. Bayes factor: Testing model versus null model (Intercept).

### Bayesian Estimates of Coefficients<sup>a,b,c</sup>

Parameter	Mode	Posterior		95% Credible Interval	
		Mean	Variance	Lower Bound	Upper Bound
(Intercept)	-9.842E-18	-9.842E-18	.023	-.303	.303
Corporate Exclusionary Index	.338	.338	.079	-.218	.894
Looseness-Tightness Full Index	.058	.058	.152	-.714	.831

a. Dependent Variable: Change Index

b. Model: (Intercept), Corporate Exclusionary Index, Looseness-Tightness Full Index

c. Assume standard reference priors.

### Bayesian Estimates of Error Variance<sup>a</sup>

Parameter	Mode	Posterior		95% Credible Interval	
		Mean	Variance	Lower Bound	Upper Bound
Error variance	.368	.467	.033	.232	.925

a. Assume standard reference priors.