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BY

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TI SEM

Covariance Matrix

PFLE	RROY	RINT	RCOM	PQUA	PDEL

RROY	1.00				
RINT	0.66	1.00			
RCOM	0.55	0.58	1.00		
PQUA	0.72	0.60	0.40	1.00	
PDEL	0.71	0.72	0.49	0.59	1.00
PFLE	0.61	0.66	0.55	0.54	0.79
1.00					
PRED	0.61	0.48	0.39	0.58	0.49
0.50					
PPROV	0.59	0.57	0.45	0.53	0.64
0.68					
DPVS	0.57	0.50	0.35	0.40	0.44
0.36					
DQUA	0.58	0.46	0.42	0.65	0.42
0.43					
DCOL	0.65	0.61	0.68	0.54	0.63
0.63					
DTRA	0.58	0.52	0.65	0.47	0.48
0.55					
DSHC	0.58	0.46	0.40	0.50	0.45
0.41					
DINS	0.57	0.55	0.83	0.40	0.46
0.53					

0.57	DDEL	0.58	0.59	0.46	0.44	0.71
0.66	DREW	0.50	0.60	0.53	0.30	0.63
0.59	DDEP	0.76	0.60	0.38	0.66	0.69
0.53	DPRO	0.68	0.69	0.38	0.69	0.54

Covariance Matrix

		PRED	PPROV	DPVS	DQUA	DCOL
DTRA	-----	-----	-----	-----	-----	-----
	PRED	1.00				
	PPROV	0.56	1.00			
	DPVS	0.40	0.35	1.00		
	DQUA	0.47	0.48	0.38	1.00	
	DCOL	0.50	0.68	0.49	0.57	1.00
	DTRA	0.42	0.66	0.44	0.47	0.75
1.00	DSHC	0.64	0.52	0.48	0.59	0.61
0.59	DINS	0.47	0.57	0.36	0.48	0.73
0.71	DDEL	0.46	0.60	0.38	0.48	0.64
0.47	DREW	0.40	0.62	0.47	0.38	0.63
0.63	DDEP	0.59	0.58	0.49	0.65	0.63
0.42	DPRO	0.52	0.61	0.54	0.52	0.57
0.59						

Covariance Matrix

		DSHC	DINS	DDEL	DREW	DDEP
DPRO	-----	-----	-----	-----	-----	-----
	DSHC	1.00				
	DINS	0.50	1.00			
	DDEL	0.57	0.55	1.00		
	DREW	0.52	0.56	0.56	1.00	
	DDEP	0.61	0.48	0.62	0.51	1.00
	DPRO	0.55	0.42	0.45	0.52	0.58
1.00						

TI SEM

Number of Iterations =18

LISREL Estimates (Maximum Likelihood)

Measurement Equations

RROY = 0.84*SR, Errorvar.=0.33 , R ² =0.67		
	(0.027)	
		12.40
RINT = 0.79*SR, Errorvar.=0.40 , R ² =0.60		
	(0.043)	(0.031)
	18.33	12.86
RCOM = 0.72*SR, Errorvar.=0.51 , R ² =0.49		
	(0.045)	(0.038)
	15.92	13.44
PQUA = 0.73*SPP, Errorvar.=0.49 , R ² =0.51		
	(0.038)	
		12.93
PDEL = 0.80*SPP, Errorvar.=0.38 , R ² =0.62		
	(0.052)	(0.031)
	15.33	12.27
PFLE = 0.78*SPP, Errorvar.=0.41 , R ² =0.59		
	(0.052)	(0.033)
	14.82	12.51
PRED = 0.68*SPP, Errorvar.=0.55 , R ² =0.45		
	(0.052)	(0.041)
	13.08	13.19
PPROV = 0.81*SPP, Errorvar.=0.36 , R ² =0.64		
	(0.052)	(0.030)
	15.54	11.85
DPVS = 0.58*SD, Errorvar.=0.67 , R ² =0.33		
	(0.046)	(0.048)
	12.56	13.97
DQUA = 0.64*SD, Errorvar.=0.59 , R ² =0.41		
	(0.045)	(0.043)
	14.18	13.79
DCOL = 0.87*SD, Errorvar.=0.24 , R ² =0.76		
	(0.040)	(0.020)
	21.83	12.12

DTRA =0.80*SD, Errorvar.=0.36 , R²=0.64
 (0.042) (0.028)
 18.97 12.75

DSHC =0.71*SD, Errorvar.=0.50 , R²=0.50
 (0.044) (0.037)
 16.15 13.46

DINS =0.79*SD, Errorvar.=0.38 , R²=0.62
 (0.043) (0.030)
 18.57 12.59

DDEL =0.75*SD, Errorvar.=0.44 , R²=0.56
 (0.043) (0.034)
 17.27 13.13

DREW =0.71*SD, Errorvar.=0.50 , R²=0.50
 (0.044) (0.036)
 16.24 13.73

DDEP =0.77*SD, Errorvar.=0.40 , R²=0.60
 (0.043) (0.031)
 18.11 13.16

DPRO =0.77*SD, Errorvar.=0.40 , R²=0.60
 (0.043) (0.032)
 18.05 12.76

Reduced Form Equations

SR =0.97*SD, Errorvar.=0.014, R²=0.99
 (0.049)
 19.68

SPP =0.93*SD, Errorvar.=0.10, R²=0.89
 (0.05)
 15.45

Correlation Matrix of Independent Variables

SD
 1.00

Covariance Matrix of Latent Variables

	SR	SPP	SD
SR	0.95		
SPP	0.94	0.97	
SD	0.97	0.93	1.00

Goodness of Fit Statistics

Degrees of Freedom =85
 Minimum Fit Function Chi-Square =168 (P =0.0510)
 Normal Theory Weighted Least Squares Chi-Square =167 (P =0.0520)
 Chi-Square Difference with 1 Degree of Freedom =4.80 (P =0.028)
 Estimated Non-centrality Parameter (NCP)=69.98
 90 Percent Confidence Interval for NCP =(54.44 ; 107.01)

Minimum Fit Function Value =0.45
 Population Discrepancy Function Value (F0)=0.19
 90 Percent Confidence Interval for F0 =(0.098 ;0.29)
 Root Mean Square Error of Approximation (RMSEA)=0.027
 90 Percent Confidence Interval for RMSEA =(0.014 ; 0.85)
 P-Value for Test of Close Fit (RMSEA < 0.05)=0.023

Expected Cross-Validation Index (ECVI)=0.51
 90 Percent Confidence Interval for ECVI =(0.56 ; 0.81)
 ECVI for Saturated Model =0.72
 ECVI for Independence Model =19.13

Chi-Square for Independence Model with 85 Degrees of Freedom = 6369.25

Independence AIC =6398.61
 Model AIC =522.32
 Saturated AIC =342.00
 Independence CAIC =5562.23
 Model CAIC =981.22
 Saturated CAIC =896.32

Normed Fit Index (NFI)=0.92
 Non-Normed Fit Index (NNFI)=0.91
 Parsimony Normed Fit Index (PNFI)=0.62
 Comparative Fit Index (CFI)=0.94
 Incremental Fit Index (IFI)=0.94
 Relative Fit Index (RFI)=0.91

Critical N (CN)=151.21

Root Mean Square Residual (RMR)=0.023
 Standardized RMR =0.052
 Goodness of Fit Index (GFI)=0.93
 Adjusted Goodness of Fit Index (AGFI)=0.94
 Parsimony Goodness of Fit Index (PGFI)=0.54

TI SEM

Fitted Covariance Matrix

	RROY	RINT	RCOM	PQUA	PDEL
PFLE	-----				

	RROY	1.00				
	RINT	0.63	1.00			
	RCOM	0.57	0.54	1.00		
	PQUA	0.71	0.54	0.49	1.00	
	PDEL	0.71	0.60	0.54	0.57	1.00
	PFLE	0.61	0.58	0.52	0.55	0.78
1.00						
	PRED	0.54	0.51	0.46	0.48	0.53
0.52						
	PPROV	0.64	0.61	0.44	0.57	0.63
0.68						
	DPVS	0.47	0.45	0.40	0.39	0.43
0.42						
	DQUA	0.52	0.49	0.45	0.43	0.48
0.46						
	DCOL	0.71	0.67	0.61	0.59	0.65
0.63						
	DTRA	0.64	0.61	0.55	0.54	0.59
0.57						
	DSHC	0.58	0.55	0.49	0.48	0.53
0.51						
	DINS	0.64	0.61	0.55	0.54	0.59
0.57						
	DDEL	0.61	0.58	0.52	0.51	0.56
0.54						
	DREW	0.58	0.55	0.49	0.48	0.53
0.51						
	DDEP	0.62	0.59	0.54	0.52	0.57
0.56						
	DPRO	0.63	0.60	0.54	0.52	0.58
0.56						

Fitted Covariance Matrix

	PRED	PPROV	DPVS	DQUA	DCOL	
DTRA						
	-----	-----	-----	-----	-----	
	PRED	1.00				
	PPROV	0.54	1.00			
	DPVS	0.37	0.44	1.00		
	DQUA	0.41	0.49	0.37	1.00	
	DCOL	0.55	0.66	0.50	0.56	1.00
	DTRA	0.51	0.60	0.46	0.51	0.69
0.99						
	DSHC	0.45	0.54	0.41	0.58	0.62
0.56						
	DINS	0.51	0.60	0.46	0.51	0.69
0.71						
	DDEL	0.48	0.57	0.43	0.48	0.65
0.48						
	DREW	0.45	0.54	0.41	0.46	0.62

0.63	DDEP	0.49	0.58	0.45	0.63	0.67
0.43	DPRO	0.49	0.59	0.45	0.50	0.59
0.61						

Fitted Covariance Matrix

DPRO	DSHC	DINS	DDEL	DREW	DDEP
-----	-----	-----	-----	-----	-----
DSHC	1.00				
DINS	0.50	1.01			
DDEL	0.53	0.59	1.00		
DREW	0.50	0.56	0.53	1.00	
DDEP	0.62	0.47	0.58	0.55	1.00
DPRO	0.55	0.41	0.43	0.55	0.60
1.00					

Fitted Residuals

PFLE	RROY	RINT	RCOM	PQUA	PDEL
-----	-----	-----	-----	-----	-----
RROY	0.00				
RINT	0.02	0.00			
RCOM	0.02	0.04	0.00		
PQUA	0.00	0.06	0.09	0.00	
PDEL	0.01	0.12	0.05	0.02	0.00
PFLE	0.00	0.08	0.03	0.01	0.00
0.00					
PRED	0.07	0.03	0.08	0.10	0.04
0.01					
PPROV	0.05	0.03	0.01	0.04	0.01
0.00					
DPVS	0.10	0.06	0.05	0.01	0.01
0.06					
DQUA	0.06	0.03	0.03	0.21	0.06
0.04					
DCOL	0.06	0.06	0.08	0.05	0.02
0.01					
DTRA	0.06	0.09	0.10	0.07	0.12
0.02					
DSHC	0.00	0.08	0.09	0.02	0.08
0.10					
DINS	0.07	0.06	0.27	0.14	0.13
0.05					
DDEL	0.02	0.02	0.06	0.07	0.15
0.03					
DREW	0.08	0.06	0.03	0.18	0.11
0.14					
DDEP	0.13	0.01	0.16	0.14	0.11

0.04
 DPRO 0.05 0.09 0.16 0.16 0.03
 0.02

Fitted Residuals

	PRED	PPROV	DPVS	DQUA	DCOL	
DTRA	-----					
PRED	0.00					
PPROV	0.02	0.00				
DPVS	0.03	0.09	0.00			
DQUA	0.06	0.00	0.01	0.00		
DCOL	0.05	0.02	0.02	0.01	0.00	
DTRA	0.08	0.06	0.02	0.04	0.06	
0.01						
DSHC	0.19	0.01	0.07	0.00	0.00	
0.02						
DINS	0.03	0.03	0.10	0.03	0.04	
0.00						
DDEL	0.02	0.03	0.05	0.00	0.01	0.01
DREW	0.06	0.08	0.06	0.08	0.01	0.01
DDEP	0.10	0.00	0.05	0.02	0.05	0.01
DPRO	0.03	0.02	0.09	0.03	0.01	0.02

Fitted Residuals

	DSHC	DINS	DDEL	DREW	DDEP	
DPRO	-----					
DSHC	0.00					
DINS	0.00	0.01				
DDEL	0.03	0.04	0.00			
DREW	0.01	0.00	0.03	0.00		
DDEP	0.02	0.01	0.04	0.04	0.00	
DPRO	0.00	0.01	0.02	0.03	0.01	
0.00						

Summary Statistics for Fitted Residuals

Smallest Fitted Residual = -0.18

Median Fitted Residual = 0.00

Largest Fitted Residual = 0.27

Stemleaf Plot

-16|7
 -14|972
 -12|0
 -10|542
 -8|432142
 -6|9877197510
 -4|9987743311975511
 -2|865544322098543210


```

-0|88875444432204433322211100000000
 0|11223334456667889901112357788
 2|0345556666893445789
 4|9166779
 6|0335056
 8|5037899
10|52
12|337
14|53
16|3
18|6
20|5
22|
24|
26|4

```

Standardized Residuals

PFLE	RROY	RINT	RCOM	PQUA	PDEL
RROY	0.75				
RINT	0.70	--			
RCOM	0.43	0.84	0.30		
PQUA	0.63	0.89	0.86	0.87	
PDEL	0.83	0.85	0.53	0.34	0.64
PFLE	0.18	0.99	0.18	0.62	0.72
0.98					
PRED	0.53	0.54	0.99	0.21	0.94
0.68					
PPROV	0.36	0.01	0.07	0.32	0.76
0.03					
DPVS	0.26	0.23	0.85	0.32	0.48
0.13					
DQUA	0.92	0.40	0.11	0.69	0.36
0.40					
DCOL	0.44	0.47	0.53	0.84	0.26
0.34					
DTRA	0.78	0.25	0.68	0.27	0.03
0.17					
DSHC	0.01	0.92	0.76	0.71	0.41
0.32					
DINS	0.10	0.23	0.80	0.33	0.55
0.29					
DDEL	0.22	0.84	0.48	0.79	0.17
0.15					
DREW	0.04	0.60	0.35	0.89	0.59
0.08					
DDEP	0.78	0.55	0.18	0.96	0.52
0.68					
DPRO	0.95	0.70	0.22	0.08	0.65
0.12					

Standardized Residuals

	PRED	PPROV	DPVS	DQUA	DCOL
DTRA					
	-----	-----	-----	-----	-----
PRED	--				
PPROV	0.93	0.16			
DPVS	0.92	0.48	--		
DQUA	0.14	0.11	0.36	--	
DCOL	0.83	0.55	0.92	0.41	--
DTRA	0.57	0.00	0.75	0.89	0.62
0.32					
DSHC	0.92	0.64	0.33	0.32	0.24
0.26					
DINS	0.33	0.65	0.25	0.27	0.96
0.24					
DDEL	0.72	0.57	0.85	0.20	0.97
0.91					
DREW	0.10	0.79	0.01	0.96	0.61
0.57					
DDEP	0.05	0.03	0.95	0.47	0.31
0.95					
DPRO	0.15	0.02	0.70	0.12	0.57
0.24					

Standardized Residuals

	DSHC	DINS	DDEL	DREW	DDEP
DPRO					
	-----	-----	-----	-----	-----
DSHC	0.32				
DINS	0.05	0.83			
DDEL	0.54	0.40	0.93		
DREW	0.61	0.11	0.16	--	
DDEP	0.74	0.22	0.98	0.66	0.70
DPRO	0.11	0.97	9.25	0.31	0.74
					0.28

Summary Statistics for Standardized Residuals

Smallest Standardized Residual = 4.22
 Median Standardized Residual = 0.05
 Largest Standardized Residual = 3.80

Stemleaf Plot

```

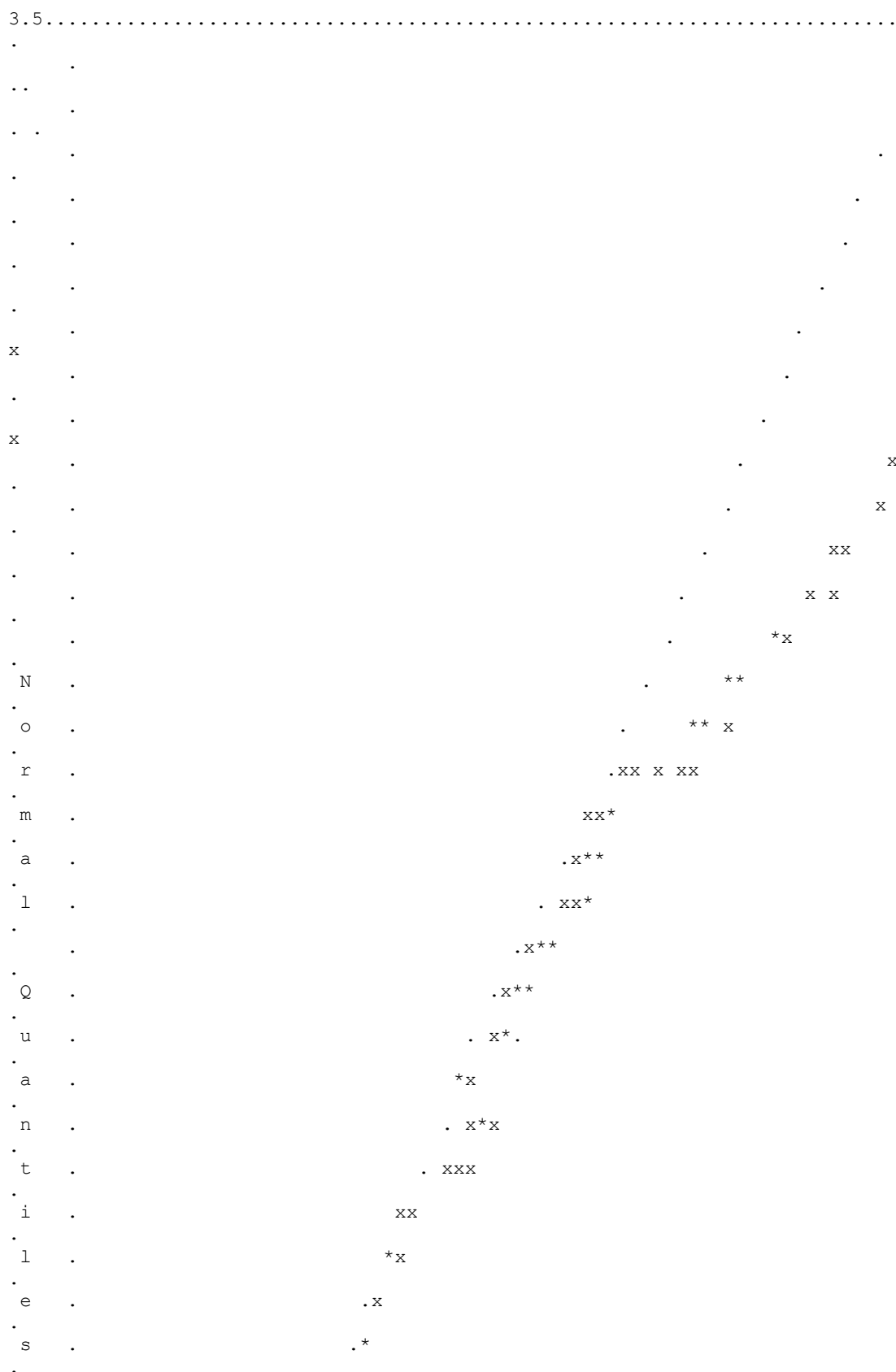
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-5|2
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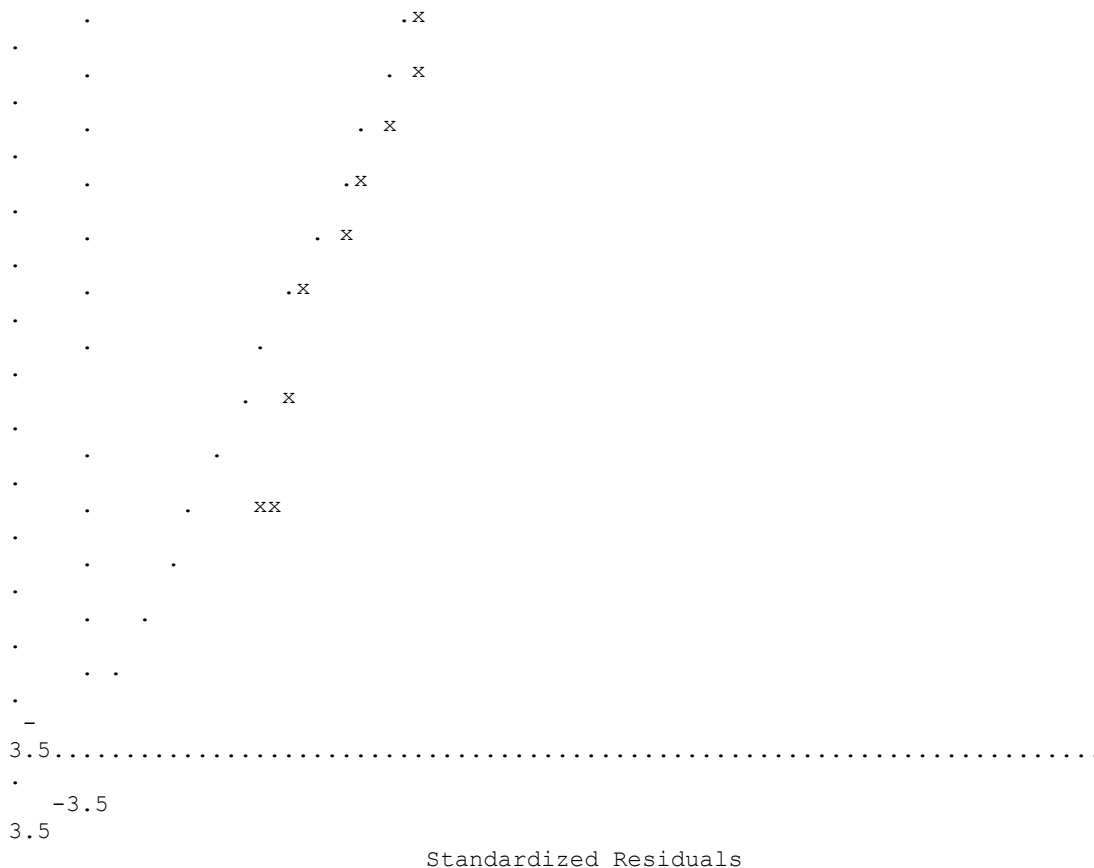
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3|00578
4|012356677
5|5
6|0189
7|1278
8|
9|
10|
11|
12|8

TI SEM

Qplot of Standardized Residuals





The Modification Indices Suggest to Add an Error Covariance Between and Decrease in Chi-Square New Estimate

		Decrease in Chi-Square	New Estimate
DDEP	RCOM	15.0	-0.08
DPRO	RINT	19.9	0.10
DPRO	RCOM	9.5	0.07
DPRO	PQUA	26.0	0.11

TI SEM

Factor Scores Regressions

ETA

	RROY	RINT	RCOM	PQUA	PDEL
PFLE					
SR	0.03	0.04	0.05	0.04	0.05
SPP	0.01	0.06	0.08	0.10	0.12

ETA

	PRED	PPROV	DPVS	DQUA	DCOL
DTRA					
SR	0.04	0.08	0.01	-0.02	0.13

SPP 0.07	0.08	0.17	0.01	-0.01	0.08
	ETA				
	DSHC	DINS	DDEL	DREW	DDEP
DPRO SR 0.19	0.03	0.17	0.12	0.01	0.14
SPP 0.12	0.02	0.11	0.07	0.01	0.09
	KSI				
	RROY	RINT	RCOM	PQUA	PDEL
PFLE SD 0.01	0.04	0.03	0.03	0.00	0.01
	KSI				
	PRED	PPROV	DPVS	DQUA	DCOL
DTRA SD 0.13	0.01	0.03	0.02	0.03	0.16
	KSI				
	DSHC	DINS	DDEL	DREW	DDEP
DPRO SD 0.23	0.04	0.21	0.15	0.01	0.18

TI SEM

Standardized Solution

LAMBDA-Y

	SR	SPP
RROY	0.82	--
RINT	0.78	--
RCOM	0.70	--
PQUA	0.72	
PDEL	0.79	
PFLE	0.76	
PRED	0.67	
PPROV	0.80	

LAMBDA-X

	SD
DPVS	0.58
DQUA	0.64
DCOL	0.87
DTRA	0.80
DSHC	0.71
DINS	0.79
DDEL	0.75
DREW	0.71
DDEP	0.77
DPRO	0.77

BETA

	SR	SPP
SR	-	
SPP	0.74	

GAMMA

	SD
SR	0.76
SPP	0.97

Correlation Matrix of ETA and KSI

	SR	SPP	SD
SR	1.00		
SPP	0.98	1.00	
SD	0.99	0.95	1.00

PSI

Note: This matrix is diagonal.

	SR	SPP
	0.01	0.00

Regression Matrix ETA on KSI (Standardized)

	SD
SR	0.76

SPP	0.97
-----	------

TI SEM	
--------	--

Completely Standardized Solution

LAMBDA-Y

	SR	SPP

RROY	0.82	--
RINT	0.78	--
RCOM	0.70	--
PQUA		0.72
PDEL		0.79
PFLE		0.77
PRED		0.67
PPROV		0.80

LAMBDA-X

	SD
DPVS	0.58
DQUA	0.64
DCOL	0.87
DTRA	0.80
DSHC	0.71
DINS	0.79
DDEL	0.75
DREW	0.71
DDEP	0.77
DPRO	0.77

BETA

	SR	SPP
SR	--	--
SPP	0.74	--

GAMMA

	SD
SR	0.99
SPP	0.74

Correlation Matrix of ETA and KSI

	SR	SPP	SD

SR	1.00		

SPP	0.98	1.00	
SD	0.99	0.95	1.00

PSI

Note: This matrix is diagonal.

SR	SPP
0.01	0.00

THETA-EPS

	RROY	RINT	RCOM	PQUA	PDEL
PFLE					
-----	-----	-----	-----	-----	-----
RROY	0.33				
RINT	--	0.40			
RCOM	--	--	0.51		
PQUA	0.14	--	--	0.49	
PDEL	0.08	--	--	--	0.38
PFLE	--	--	--	--	0.18
0.41					
PRED	--	--	--	--	--
--					
PPROV	--	--	0.11	--	--
0.07					

THETA-EPS

	PRED	PPROV
-----	-----	-----
PRED	0.55	
PPROV	--	0.36

THETA-DELTA

	DPVS	DQUA	DCOL	DTRA	DSHC
DINS					
-----	-----	-----	-----	-----	-----
DPVS	0.67				
DQUA	--	0.59			
DCOL	--	--	0.24		
DTRA	--	--	--	0.36	
DSHC	--	0.13	--	--	0.50
DINS	--	--	--	0.08	0.06
0.38					
DDEL	--	--	--	0.11	--
--					
DREW	--	--	--	0.06	--
--					
DDEP	--	0.14	--	0.18	0.08
0.15					
DPRO	--	--	0.09	--	--
0.20					

THETA-DELTA

	DDEL	DREW	DDEP	DPRO
DDEL	0.44			
DREW	--	0.50		
DDEP	--	--	0.40	
DPRO	0.15	--	--	0.40

Regression Matrix ETA on KSI (Standardized)

	SD
SR	0.99
SPP	0.95

TI SEM

Total and Indirect Effects

Total Effects of KSI on ETA

	SD
SR	0.97 (0.05) 19.68
SPP	0.93 (0.05) 15.45

Indirect Effects of KSI on ETA

	SD
SR	--
SPP	0.97 (0.05) 19.68

Total Effects of ETA on ETA

	SR	SPP
SR	--	--
SPP	0.74 (0.01) 13.76	--

Largest Eigenvalue of B*B' (Stability Index) is 7.590

Total Effects of ETA on Y

	SR	SPP
RROY	0.84	--
RINT	0.79	--
RCOM	0.72	--
PQUA	0.80	0.73
PDEL	0.78	0.80
PFLE	0.68	0.78

PRED	0.81	0.68
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Indirect Effects of ETA on Y

	SR	SPP
RROY	--	--
RINT	--	--
RCOM	--	--
PQUA	0.38	--
PDEL	0.41	--
PFLE	0.55	--
PRED	0.36	--

Total Effects of KSI on Y

	SD
RROY	0.84
RINT	0.77
RCOM	0.81
PQUA	0.68
PDEL	0.75
PFLE	0.72
PRED	0.64

TI SEM

Standardized Total and Indirect Effects

Standardized Total Effects of KSI on ETA

	SD
SR	0.99
SPP	0.95

Standardized Indirect Effects of KSI on ETA

	SD
SR	--
SPP	0.93

Standardized Total Effects of ETA on ETA

	SR	SPP
SR	--	--
SPP	0.93	--

Standardized Total Effects of ETA on Y

	SR	SPP
RROY	0.82	--
RINT	0.78	--
RCOM	0.70	--
PQUA	0.96	0.72
PDEL	0.15	0.79
PFLE	0.09	0.76
PRED	0.84	0.67

PPROV	0.19	0.80
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Completely Standardized Total Effects of ETA on Y

	SR	SPP
RROY	0.82	--
RINT	0.78	--
RCOM	0.70	--
PQUA	0.96	0.72
PDEL	0.16	0.79
PFLE	0.09	0.77
PRED	0.84	0.67
PPROV	0.19	0.80

Standardized Indirect Effects of ETA on Y

	SR	SPP
RROY	--	--
RINT	--	--
RCOM	--	--
PQUA	0.96	--
PDEL	0.15	--
PFLE	0.09	--
PRED	0.84	--
PPROV	0.19	--

Completely Standardized Indirect Effects of ETA on Y

	SR	SPP
RROY	--	--
RINT	--	--
RCOM	--	--
PQUA	0.96	--
PDEL	0.16	--
PFLE	0.09	--
PRED	0.84	--
PPROV	0.19	--

Standardized Total Effects of KSI on Y

	SD
RROY	0.81
RINT	0.77
RCOM	0.70
PQUA	0.68
PDEL	0.75
PFLE	0.72
PRED	0.64
PPROV	0.76

Completely Standardized Total Effects of KSI on Y

	SD
RROY	0.81
RINT	0.77
RCOM	0.70
PQUA	0.68
PDEL	0.75
PFLE	0.72
PRED	0.64
PPROV	0.76