

Structural Equation Modelling

CFA com base na EFA dos autores originais.

Models Info

Estimation Method	DWLS
Optimization Method	NLMINB
Number of observations	101
Free parameters	79
Standard errors	Robust
Scaled test	Mean adjusted scaled and shifted
Converged	TRUE
Iterations	47
Model	Endogenous1=~s7_freq+s8_freq+s9_freq Endogenous2=~s6_freq+s10_freq+s11_freq+s12_freq Endogenous3=~s2_freq+s20_freq Endogenous4=~s3_freq+s4_freq+s5_freq Endogenous5=~s14_freq+s15_freq

Nota. Variable (s7_freq,s8_freq,s9_freq,s6_freq,s10_freq,s11_freq,s12_freq,s2_freq,s20_freq,s3_freq,s4_freq,s5_freq,s14_freq,s15_freq) has been coerced to ordered type.

Nota. lavaan->lav_object_post_check(): some estimated ov variances are negative

Nota. Covariance matrix of latent variables is not positive definite.

Overall Tests

Model tests

Label	X ²	df	p
User Model	54.6	67	.862
Baseline Model	3463.3	91	<.001
Scaled User	94.9	67	.014
Scaled Baseline	1443.7	91	<.001

Nota. Covariance matrix of latent variables is not positive definite.

Fit indices

Type	SRMR	RMSEA	95% Confidence Intervals		RMSEA p
			Lower	Upper	
Classical	0.072	0.000	0.000	0.033	.989
Robust	0.058	0.186	0.148	0.225	<.001
Scaled	0.058	0.065	0.030	0.093	.209

User model versus baseline model

	Model	Scaled	Robust
Comparative Fit Index (CFI)	1.000	0.979	0.798
Tucker-Lewis Index (TLI)	1.005	0.972	0.726
Bentler-Bonett Non-normed Fit Index (NNFI)	1.005	0.972	0.726
Relative Noncentrality Index (RNI)	1.004	0.979	0.798
Bentler-Bonett Normed Fit Index (NFI)	0.984	0.934	
Bollen's Relative Fit Index (RFI)	0.979	0.911	
Bollen's Incremental Fit Index (IFI)	1.004	0.980	
Parsimony Normed Fit Index (PNFI)	0.725	0.688	

Additional fit indices

	Model
Hoelter Critical N (CN), $\alpha=0.05$	160.595
Hoelter Critical N (CN), $\alpha=0.01$	178.403
Goodness of Fit Index (GFI)	0.990
Adjusted Goodness of Fit Index (AGFI)	0.978
Parsimony Goodness of Fit Index (PGFI)	0.454
McDonald Fit Index (MFI)	1.064
Expected Cross-Validation Index (ECVI)	.
Loglikelihood user model (H0)	.
Loglikelihood unrestricted model (H1)	.
Akaike (AIC)	.
Bayesian (BIC)	.
Sample-size adjusted Bayesian (SABIC)	.

Nota. Covariance matrix of latent variables is not positive definite.

Estimates

Measurement model

Latent	Observed	Estimate	SE	95% Confidence Intervals		β	β 95% Confidence Intervals		z	p
				Lower	Upper		Lower	Upper		
Endogenous1	s7_freq	1.000	0.0000	1.000	1.000	0.805	0.692	0.918		
	s8_freq	1.040	0.0862	0.871	1.209	0.838	0.745	0.931	12.06	<.001
	s9_freq	1.079	0.1045	0.874	1.284	0.869	0.749	0.989	10.33	<.001
Endogenous2	s6_freq	1.000	0.0000	1.000	1.000	0.552	0.399	0.705		
	s10_freq	1.433	0.2271	0.988	1.878	0.791	0.665	0.916	6.31	<.001
	s11_freq	1.375	0.2025	0.978	1.772	0.759	0.653	0.865	6.79	<.001
	s12_freq	1.190	0.2108	0.776	1.603	0.657	0.530	0.783	5.64	<.001
Endogenous3	s2_freq	1.000	0.0000	1.000	1.000	0.841	0.731	0.951		
	s20_freq	0.799	0.0890	0.624	0.973	0.672	0.524	0.820	8.97	<.001
Endogenous4	s3_freq	1.000	0.0000	1.000	1.000	0.839	0.745	0.933		
	s4_freq	1.021	0.0778	0.868	1.173	0.857	0.762	0.952	13.12	<.001
	s5_freq	1.032	0.0799	0.875	1.188	0.866	0.759	0.972	12.91	<.001
Endogenous5	s14_freq	1.000	0.0000	1.000	1.000	0.571	0.364	0.779		
	s15_freq	1.980	0.6666	0.674	3.287	1.131	0.768	1.493	2.97	.003

Variances and Covariances

Variable 1	Variable 2	Estimate	SE	95% Confidence Intervals		β	β 95% Confidence Intervals		z	p
				Lower	Upper		Lower	Upper		
s7_freq	s7_freq	0.351	0.0000	0.3513	0.351	0.351	0.1693	0.533		
s8_freq	s8_freq	0.298	0.0000	0.2980	0.298	0.298	0.1426	0.453		
s9_freq	s9_freq	0.245	0.0000	0.2450	0.245	0.245	0.0369	0.453		
s6_freq	s6_freq	0.695	0.0000	0.6954	0.695	0.695	0.5262	0.865		
s10_freq	s10_freq	0.375	0.0000	0.3746	0.375	0.375	0.1761	0.573		
s11_freq	s11_freq	0.424	0.0000	0.4238	0.424	0.424	0.2634	0.584		
s12_freq	s12_freq	0.569	0.0000	0.5689	0.569	0.569	0.4026	0.735		
s2_freq	s2_freq	0.292	0.0000	0.2925	0.292	0.292	0.1068	0.478		
s20_freq	s20_freq	0.549	0.0000	0.5488	0.549	0.549	0.3497	0.748		
s3_freq	s3_freq	0.296	0.0000	0.2958	0.296	0.296	0.1381	0.454		
s4_freq	s4_freq	0.266	0.0000	0.2662	0.266	0.266	0.1034	0.429		
s5_freq	s5_freq	0.251	0.0000	0.2507	0.251	0.251	0.0669	0.435		
s14_freq	s14_freq	0.674	0.0000	0.6739	0.674	0.674	0.4369	0.911		
s15_freq	s15_freq	-0.279	0.0000	-0.2786	-0.279	-0.279	-1.0978	0.541		
Endogenous1	Endogenous1	0.649	0.0929	0.4667	0.831	1.000	1.0000	1.000	6.99	<.001
Endogenous2	Endogenous2	0.305	0.0863	0.1354	0.474	1.000	1.0000	1.000	3.53	<.001
Endogenous3	Endogenous3	0.708	0.0947	0.5219	0.893	1.000	1.0000	1.000	7.47	<.001
Endogenous4	Endogenous4	0.704	0.0805	0.5464	0.862	1.000	1.0000	1.000	8.75	<.001
Endogenous5	Endogenous5	0.326	0.1209	0.0891	0.563	1.000	1.0000	1.000	2.70	.007
Endogenous1	Endogenous2	0.391	0.0777	0.2389	0.544	0.880	0.7844	0.976	5.03	<.001
Endogenous1	Endogenous3	0.599	0.0683	0.4656	0.733	0.885	0.7700	1.000	8.78	<.001
Endogenous1	Endogenous4	0.496	0.0687	0.3614	0.631	0.734	0.6306	0.837	7.22	<.001
Endogenous1	Endogenous5	0.114	0.0759	-0.0351	0.262	0.247	-0.0358	0.530	1.50	.134
Endogenous2	Endogenous3	0.425	0.0716	0.2848	0.566	0.916	0.8063	1.025	5.94	<.001
Endogenous2	Endogenous4	0.414	0.0697	0.2774	0.551	0.894	0.8030	0.985	5.94	<.001
Endogenous2	Endogenous5	0.140	0.0650	0.0126	0.267	0.444	0.1560	0.732	2.15	.031
Endogenous3	Endogenous4	0.677	0.0615	0.5560	0.797	0.959	0.8473	1.070	10.99	<.001
Endogenous3	Endogenous5	0.271	0.1021	0.0710	0.471	0.564	0.3129	0.816	2.66	.008
Endogenous4	Endogenous5	0.242	0.0983	0.0491	0.435	0.505	0.2502	0.759	2.46	.014

Intercepts

Variable	Intercept	SE	95% Confidence Intervals		z	p
			Lower	Upper		
s7_freq	0.000	0.000	0.000	0.000		
s8_freq	0.000	0.000	0.000	0.000		
s9_freq	0.000	0.000	0.000	0.000		
s6_freq	0.000	0.000	0.000	0.000		
s10_freq	0.000	0.000	0.000	0.000		
s11_freq	0.000	0.000	0.000	0.000		
s12_freq	0.000	0.000	0.000	0.000		
s2_freq	0.000	0.000	0.000	0.000		
s20_freq	0.000	0.000	0.000	0.000		
s3_freq	0.000	0.000	0.000	0.000		
s4_freq	0.000	0.000	0.000	0.000		
s5_freq	0.000	0.000	0.000	0.000		
s14_freq	0.000	0.000	0.000	0.000		
s15_freq	0.000	0.000	0.000	0.000		
Endogenous1	0.000	0.000	0.000	0.000		
Endogenous2	0.000	0.000	0.000	0.000		
Endogenous3	0.000	0.000	0.000	0.000		
Endogenous4	0.000	0.000	0.000	0.000		
Endogenous5	0.000	0.000	0.000	0.000		

Thresholds

Variable	Step	Thresholds	SE	95% Confidence Intervals		z	p
				Lower	Upper		
s7_freq	t1	0.264	0.127	0.015	0.512	2.077	.038
s7_freq	t2	0.449	0.130	0.194	0.704	3.453	<.001
s7_freq	t3	1.043	0.154	0.742	1.344	6.792	<.001
s7_freq	t4	1.410	0.183	1.052	1.769	7.706	<.001
s8_freq	t1	0.264	0.127	0.015	0.512	2.077	.038
s8_freq	t2	0.562	0.133	0.302	0.822	4.231	<.001
s8_freq	t3	1.181	0.163	0.862	1.500	7.250	<.001
s8_freq	t4	1.410	0.183	1.052	1.769	7.706	<.001
s9_freq	t1	0.505	0.131	0.247	0.762	3.843	<.001
s9_freq	t2	0.651	0.135	0.386	0.917	4.807	<.001
s9_freq	t3	1.001	0.151	0.705	1.297	6.627	<.001
s9_freq	t4	2.058	0.290	1.489	2.627	7.092	<.001
s6_freq	t1	-0.037	0.125	-0.283	0.208	-0.297	.766
s6_freq	t2	0.187	0.126	-0.060	0.434	1.484	.138
s6_freq	t3	0.682	0.137	0.415	0.950	4.997	<.001
s6_freq	t4	1.232	0.167	0.905	1.559	7.385	<.001
s10_freq	t1	0.533	0.132	0.274	0.792	4.037	<.001
s10_freq	t2	0.714	0.138	0.444	0.984	5.186	<.001
s10_freq	t3	1.132	0.159	0.820	1.445	7.105	<.001
s10_freq	t4	2.058	0.290	1.489	2.627	7.092	<.001
s11_freq	t1	0.315	0.128	0.065	0.566	2.471	.013
s11_freq	t2	0.682	0.137	0.415	0.950	4.997	<.001
s11_freq	t3	1.232	0.167	0.905	1.559	7.385	<.001
s11_freq	t4	2.058	0.290	1.489	2.627	7.092	<.001
s12_freq	t1	0.533	0.132	0.274	0.792	4.037	<.001
s12_freq	t2	0.621	0.135	0.357	0.885	4.616	<.001
s12_freq	t3	1.287	0.171	0.951	1.623	7.509	<.001
s12_freq	t4	2.330	0.375	1.596	3.065	6.218	<.001
s2_freq	t1	0.162	0.126	-0.085	0.409	1.287	.198
s2_freq	t2	0.449	0.130	0.194	0.704	3.453	<.001
s2_freq	t3	1.043	0.154	0.742	1.344	6.792	<.001
s2_freq	t4	1.755	0.228	1.308	2.202	7.693	<.001
s20_freq	t1	0.449	0.130	0.194	0.704	3.453	<.001
s20_freq	t2	0.621	0.135	0.357	0.885	4.616	<.001
s20_freq	t3	1.087	0.156	0.780	1.393	6.952	<.001
s20_freq	t4	1.481	0.191	1.107	1.855	7.770	<.001
s3_freq	t1	0.112	0.126	-0.134	0.358	0.891	.373
s3_freq	t2	0.342	0.128	0.091	0.592	2.668	.008
s3_freq	t3	0.746	0.139	0.474	1.019	5.374	<.001
s3_freq	t4	1.181	0.163	0.862	1.500	7.250	<.001
s4_freq	t1	0.505	0.131	0.247	0.762	3.843	<.001
s4_freq	t2	0.885	0.145	0.601	1.169	6.107	<.001
s4_freq	t3	1.287	0.171	0.951	1.623	7.509	<.001
s4_freq	t4	1.755	0.228	1.308	2.202	7.693	<.001
s5_freq	t1	0.651	0.135	0.386	0.917	4.807	<.001
s5_freq	t2	0.885	0.145	0.601	1.169	6.107	<.001

Thresholds

s5_freq	t3	2.058	0.290	1.489	2.627	7.092	<.001
s14_freq	t1	0.591	0.134	0.329	0.853	4.424	<.001
s14_freq	t2	1.087	0.156	0.780	1.393	6.952	<.001
s14_freq	t3	1.755	0.228	1.308	2.202	7.693	<.001
s14_freq	t4	2.058	0.290	1.489	2.627	7.092	<.001
s15_freq	t1	0.922	0.147	0.635	1.210	6.284	<.001
s15_freq	t2	1.232	0.167	0.905	1.559	7.385	<.001
s15_freq	t3	1.410	0.183	1.052	1.769	7.706	<.001
s15_freq	t4	2.058	0.290	1.489	2.627	7.092	<.001

Additional outputs

Reliability indices

Variable	α	Ordinal α	ω_1	ω_2	ω_3	AVE
Endogenous1	0.787	0.870	0.806	0.806	0.812	0.702
Endogenous2	0.675	0.764	0.689	0.689	0.712	0.484
Endogenous3	0.593	0.722	0.635	0.635	0.635	0.579
Endogenous4	0.778	0.880	0.810	0.810	0.818	0.729
Endogenous5	0.550	0.785	0.752	0.752	0.752	0.802

Nota. The reliability() function was deprecated in 2022 and will cease to be included in future versions of semTools. See help('semTools-deprecated') for details. It is replaced by the compRelSEM() function, which can estimate alpha and model-based reliability in an even wider variety of models and data types, with greater control in specifying the desired type of reliability coefficient (i.e., more explicitly choosing assumptions). The average variance extracted should never have been included because it is not a reliability coefficient. It is now available from the AVE() function.

Covariances and correlations

Observed covariances (lower triangle) and correlations (upper triangle)

	s7_freq	s8_freq	s9_freq	s6_freq	s10_freq	s11_freq	s12_freq	s2_freq	s20_freq	s3_freq	s4_freq	s5_freq	s14_freq	s15_freq
s7_freq	1.000	0.7281	0.6415	0.552	0.431	0.4492	0.445	0.580	0.503	0.446	0.575	0.418	0.2111	0.248
s8_freq	0.728	1.0000	0.7039	0.410	0.527	0.6096	0.330	0.588	0.562	0.517	0.592	0.474	0.0852	0.256
s9_freq	0.641	0.7039	1.0000	0.486	0.637	0.6261	0.451	0.691	0.442	0.581	0.498	0.532	-0.0217	0.237
s6_freq	0.552	0.4102	0.4859	1.000	0.416	0.3497	0.286	0.414	0.346	0.322	0.367	0.365	0.1596	0.138
s10_freq	0.431	0.5269	0.6367	0.416	1.000	0.6099	0.585	0.587	0.432	0.636	0.610	0.525	0.1156	0.595
s11_freq	0.449	0.6096	0.6261	0.350	0.610	1.0000	0.438	0.538	0.445	0.700	0.513	0.592	0.0346	0.265
s12_freq	0.445	0.3303	0.4512	0.286	0.585	0.4380	1.000	0.550	0.563	0.439	0.514	0.525	0.2551	0.301
s2_freq	0.580	0.5879	0.6907	0.414	0.587	0.5378	0.550	1.000	0.565	0.614	0.662	0.794	0.2001	0.424
s20_freq	0.503	0.5616	0.4417	0.346	0.432	0.4446	0.563	0.565	1.000	0.380	0.493	0.512	0.3912	0.554
s3_freq	0.446	0.5173	0.5808	0.322	0.636	0.6996	0.439	0.614	0.380	1.000	0.764	0.630	0.1961	0.478
s4_freq	0.575	0.5924	0.4982	0.367	0.610	0.5126	0.514	0.662	0.493	0.764	1.000	0.734	0.1733	0.481
s5_freq	0.418	0.4739	0.5322	0.365	0.525	0.5922	0.525	0.794	0.512	0.630	0.734	1.000	0.4013	0.479
s14_freq	0.211	0.0852	-0.0217	0.160	0.116	0.0346	0.255	0.200	0.391	0.196	0.173	0.401	1.0000	0.646
s15_freq	0.248	0.2561	0.2365	0.138	0.595	0.2650	0.301	0.424	0.554	0.478	0.481	0.479	0.6457	1.000

Fitted covariances (lower triangle) and correlations (upper triangle)

	s7_freq	s8_freq	s9_freq	s6_freq	s10_freq	s11_freq	s12_freq	s2_freq	s20_freq	s3_freq	s4_freq	s5_freq	s14_freq	s15_freq
s7_freq	1.000	0.675	0.700	0.391	0.561	0.538	0.465	0.599	0.479	0.496	0.506	0.512	0.114	0.225
s8_freq	0.675	1.000	0.728	0.407	0.583	0.560	0.484	0.624	0.498	0.516	0.527	0.532	0.118	0.234
s9_freq	0.700	0.728	1.000	0.422	0.605	0.580	0.502	0.647	0.516	0.535	0.546	0.552	0.123	0.243
s6_freq	0.391	0.407	0.422	1.000	0.436	0.419	0.362	0.425	0.340	0.414	0.423	0.427	0.140	0.277
s10_freq	0.561	0.583	0.605	0.436	1.000	0.600	0.519	0.609	0.487	0.593	0.606	0.612	0.201	0.397
s11_freq	0.538	0.560	0.580	0.419	0.600	1.000	0.498	0.585	0.467	0.570	0.581	0.588	0.193	0.381
s12_freq	0.465	0.484	0.502	0.362	0.519	0.498	1.000	0.506	0.404	0.493	0.503	0.508	0.167	0.330
s2_freq	0.599	0.624	0.647	0.425	0.609	0.585	0.506	1.000	0.565	0.677	0.691	0.698	0.271	0.537
s20_freq	0.479	0.498	0.516	0.340	0.487	0.467	0.404	0.565	1.000	0.540	0.552	0.557	0.217	0.429
s3_freq	0.496	0.516	0.535	0.414	0.593	0.570	0.493	0.677	0.540	1.000	0.719	0.726	0.242	0.479
s4_freq	0.506	0.527	0.546	0.423	0.606	0.581	0.503	0.691	0.552	0.719	1.000	0.741	0.247	0.489
s5_freq	0.512	0.532	0.552	0.427	0.612	0.588	0.508	0.698	0.557	0.726	0.741	1.000	0.249	0.494
s14_freq	0.114	0.118	0.123	0.140	0.201	0.193	0.167	0.271	0.217	0.242	0.247	0.249	1.000	0.646
s15_freq	0.225	0.234	0.243	0.277	0.397	0.381	0.330	0.537	0.429	0.479	0.489	0.494	0.646	1.000

Residual covariances (lower triangle) and correlations (upper triangle)

	s7_freq	s8_freq	s9_freq	s6_freq	s10_freq	s11_freq	s12_freq	s2_freq	s20_freq	s3_freq	s4_freq	s5_freq	s14_freq	s15_freq
s7_freq	0.0000	0.05329	-0.05834	0.16130	-0.12935	-0.08881	-0.0202	-0.0191	0.02460	-0.04952	0.06863	-0.09388	0.0975	0.02306
s8_freq	0.0533	0.00000	-0.02409	0.00330	-0.05626	0.04986	-0.1538	-0.0357	0.06361	0.00139	0.06567	-0.05836	-0.0330	0.02210
s9_freq	-0.0583	-0.02409	0.00000	0.06387	0.03196	0.04568	-0.0508	0.0441	-0.07478	0.04572	-0.04798	-0.01976	-0.1443	-0.00613
s6_freq	0.1613	0.00330	0.06387	0.00000	-0.02062	-0.06928	-0.0765	-0.0115	0.00607	-0.09171	-0.05583	-0.06214	0.0196	-0.13961
s10_freq	-0.1294	-0.05626	0.03196	-0.02062	0.00000	0.00956	0.0654	-0.0220	-0.05443	0.04286	0.00417	-0.08762	-0.0851	0.19731
s11_freq	-0.0888	0.04986	0.04568	-0.06928	0.00956	0.00000	-0.0604	-0.0470	-0.02236	0.13006	-0.06882	0.00465	-0.1580	-0.11627
s12_freq	-0.0202	-0.15382	-0.05081	-0.07650	0.06537	-0.06041	0.0000	0.0440	0.15923	-0.05382	0.01111	0.01630	0.0886	-0.02847
s2_freq	-0.0191	-0.03566	0.04407	-0.01150	-0.02197	-0.04701	0.0440	0.0000	1.13e-7	-0.06251	-0.02836	0.09612	-0.0710	-0.11243
s20_freq	0.0246	0.06361	-0.07478	0.00607	-0.05443	-0.02236	0.1592	1.13e-7	0.00000	-0.16022	-0.05853	-0.04538	0.1747	0.12575
s3_freq	-0.0495	0.00139	0.04572	-0.09171	0.04286	0.13006	-0.0538	-0.0625	-0.16022	0.00000	0.04565	-0.09597	-0.0457	-0.00115
s4_freq	0.0686	0.06567	-0.04798	-0.05583	0.00417	-0.06882	0.0111	-0.0284	-0.05853	0.04565	0.00000	-0.00766	-0.0736	-0.00739
s5_freq	-0.0939	-0.05836	-0.01976	-0.06214	-0.08762	0.00465	0.0163	0.0961	-0.04538	-0.09597	-0.00766	0.00000	0.1518	-0.01509
s14_freq	0.0975	-0.03298	-0.14425	0.01956	-0.08505	-0.15796	0.0886	-0.0710	0.17466	-0.04574	-0.07359	0.15181	0.0000	1.43e-8
s15_freq	0.0231	0.02210	-0.00613	-0.13961	0.19731	-0.11627	-0.0285	-0.1124	0.12575	-0.00115	-0.00739	-0.01509	1.43e-8	0.00000

Modification indices

Modification indices

			Modif. index	EPC	sEPC (LV)	sEPC (all)	sEPC (nox)
s2_freq	~~	s5_freq	7.10432	-0.216	-0.216	-0.798	-0.798
Endogenous1	==	s6_freq	5.91550	-0.929	-0.748	-0.748	-0.748
s7_freq	~~	s6_freq	5.47715	-0.206	-0.206	-0.417	-0.417
s10_freq	~~	s15_freq	4.72892	-0.311	-0.311	-0.961	-0.961
s11_freq	~~	s3_freq	4.46833	-0.179	-0.179	-0.505	-0.505
Endogenous4	==	s6_freq	3.46879	0.819	0.687	0.687	0.687
Endogenous5	==	s2_freq	3.37798	0.567	0.324	0.324	0.324
Endogenous5	==	s20_freq	3.37795	-0.453	-0.259	-0.259	-0.259
Endogenous5	==	s10_freq	3.06544	-0.424	-0.242	-0.242	-0.242
s2_freq	~~	s15_freq	2.99984	0.271	0.271	0.950	0.950
s12_freq	~~	s20_freq	2.98294	-0.185	-0.185	-0.332	-0.332
s8_freq	~~	s12_freq	2.84038	0.180	0.180	0.436	0.436
Endogenous1	==	s10_freq	2.58352	0.605	0.488	0.488	0.488
Endogenous5	==	s11_freq	2.50628	0.392	0.224	0.224	0.224
s20_freq	~~	s14_freq	2.41934	-0.207	-0.207	-0.340	-0.340
s20_freq	~~	s3_freq	2.33290	0.191	0.191	0.475	0.475
Endogenous5	==	s6_freq	2.22199	0.373	0.213	0.213	0.213
s20_freq	~~	s15_freq	2.13851	-0.194	-0.194	-0.497	-0.497
s7_freq	~~	s10_freq	2.12553	0.158	0.158	0.434	0.434
s5_freq	~~	s14_freq	1.79025	-0.185	-0.185	-0.450	-0.450
s11_freq	~~	s14_freq	1.70248	0.179	0.179	0.336	0.336
s7_freq	~~	s8_freq	1.64653	-0.114	-0.114	-0.352	-0.352
s10_freq	~~	s12_freq	1.57085	-0.106	-0.106	-0.229	-0.229
s3_freq	~~	s5_freq	1.49244	0.136	0.136	0.501	0.501
Endogenous4	==	s20_freq	1.39970	0.790	0.663	0.663	0.663
Endogenous4	==	s2_freq	1.39958	-0.990	-0.830	-0.830	-0.830
s3_freq	~~	s4_freq	1.34159	-0.104	-0.104	-0.370	-0.370
Endogenous5	==	s5_freq	1.28528	-0.312	-0.178	-0.178	-0.178
Endogenous2	==	s5_freq	1.25706	0.771	0.425	0.425	0.425
Endogenous2	==	s3_freq	1.19403	-0.733	-0.405	-0.405	-0.405
Endogenous4	==	s12_freq	1.17210	-0.431	-0.362	-0.362	-0.362
s2_freq	~~	s3_freq	1.16064	0.097	0.097	0.330	0.330
s7_freq	~~	s11_freq	1.05021	0.107	0.107	0.277	0.277
s9_freq	~~	s14_freq	1.02068	0.156	0.156	0.384	0.384
s7_freq	~~	s4_freq	0.94887	-0.090	-0.090	-0.295	-0.295
s11_freq	~~	s15_freq	0.91173	0.150	0.150	0.437	0.437
s10_freq	~~	s5_freq	0.91013	0.106	0.106	0.347	0.347
s6_freq	~~	s15_freq	0.90221	0.155	0.155	0.353	0.353
Endogenous1	==	s12_freq	0.85074	0.339	0.273	0.273	0.273
s9_freq	~~	s20_freq	0.83182	0.096	0.096	0.263	0.263
s11_freq	~~	s4_freq	0.80236	0.087	0.087	0.259	0.259
s7_freq	~~	s9_freq	0.80094	0.093	0.093	0.318	0.318
s6_freq	~~	s3_freq	0.80078	0.104	0.104	0.230	0.230
Endogenous5	==	s12_freq	0.76401	-0.208	-0.119	-0.119	-0.119
s8_freq	~~	s11_freq	0.73901	-0.072	-0.072	-0.202	-0.202
s7_freq	~~	s5_freq	0.68928	0.105	0.105	0.355	0.355
s9_freq	~~	s11_freq	0.68689	-0.067	-0.067	-0.209	-0.209
s11_freq	~~	s12_freq	0.67335	0.079	0.079	0.161	0.161

Nota. No modification indices above threshold

Modification indices

s8_freq	~~	s4_freq	0.66491	-0.082	-0.082	-0.291	-0.291
s11_freq	~~	s2_freq	0.64900	0.072	0.072	0.206	0.206
s7_freq	~~	s14_freq	0.62986	-0.107	-0.107	-0.220	-0.220
s8_freq	~~	s20_freq	0.62375	-0.082	-0.082	-0.203	-0.203
s9_freq	~~	s3_freq	0.61118	-0.065	-0.065	-0.241	-0.241
s8_freq	~~	s10_freq	0.60653	0.075	0.075	0.224	0.224
Endogenous1	==	s5_freq	0.58544	0.191	0.154	0.154	0.154
s9_freq	~~	s6_freq	0.57808	-0.077	-0.077	-0.186	-0.186
Endogenous2	==	s9_freq	0.56351	-0.478	-0.264	-0.264	-0.264
s12_freq	~~	s2_freq	0.56094	-0.064	-0.064	-0.157	-0.157
s9_freq	~~	s2_freq	0.55870	-0.071	-0.071	-0.267	-0.267
s8_freq	~~	s5_freq	0.53011	0.073	0.073	0.268	0.268
s12_freq	~~	s14_freq	0.51714	-0.097	-0.097	-0.157	-0.157
Endogenous1	==	s11_freq	0.50044	-0.252	-0.203	-0.203	-0.203
s6_freq	~~	s11_freq	0.49450	0.082	0.082	0.151	0.151
s12_freq	~~	s3_freq	0.48613	0.065	0.065	0.160	0.160
Endogenous2	==	s15_freq	0.46096	-0.544	-0.300	-0.300	-0.300
Endogenous2	==	s14_freq	0.46096	0.275	0.152	0.152	0.152
s2_freq	~~	s14_freq	0.45711	0.094	0.094	0.212	0.212
Endogenous2	==	s8_freq	0.45251	0.447	0.246	0.246	0.246
Endogenous3	==	s12_freq	0.42213	-0.416	-0.350	-0.350	-0.350
s6_freq	~~	s12_freq	0.41617	0.084	0.084	0.133	0.133
s9_freq	~~	s4_freq	0.38929	0.061	0.061	0.237	0.237
s20_freq	~~	s4_freq	0.38629	0.073	0.073	0.192	0.192
s10_freq	~~	s14_freq	0.37935	0.094	0.094	0.188	0.188
s10_freq	~~	s3_freq	0.37534	-0.058	-0.058	-0.173	-0.173
Endogenous5	==	s4_freq	0.33677	0.147	0.084	0.084	0.084
s8_freq	~~	s2_freq	0.33449	0.056	0.056	0.189	0.189
Endogenous1	==	s20_freq	0.33227	0.182	0.147	0.147	0.147
Endogenous1	==	s2_freq	0.33224	-0.228	-0.184	-0.184	-0.184
s4_freq	~~	s14_freq	0.33175	0.086	0.086	0.202	0.202
s6_freq	~~	s4_freq	0.32823	0.065	0.065	0.151	0.151
s9_freq	~~	s12_freq	0.32465	0.060	0.060	0.160	0.160
Endogenous1	==	s15_freq	0.29964	-0.228	-0.183	-0.183	-0.183
Endogenous1	==	s14_freq	0.29964	0.115	0.093	0.093	0.093
s9_freq	~~	s10_freq	0.29169	-0.047	-0.047	-0.155	-0.155
Endogenous4	==	s15_freq	0.28235	-0.456	-0.383	-0.383	-0.383
Endogenous4	==	s14_freq	0.28235	0.230	0.193	0.193	0.193
s7_freq	~~	s3_freq	0.27456	0.058	0.058	0.179	0.179
s6_freq	~~	s5_freq	0.26193	0.068	0.068	0.164	0.164
s10_freq	~~	s20_freq	0.26191	0.064	0.064	0.140	0.140
s8_freq	~~	s9_freq	0.26065	0.051	0.051	0.188	0.188
Endogenous5	==	s3_freq	0.25563	0.134	0.077	0.077	0.077
Endogenous3	==	s15_freq	0.25403	-0.295	-0.248	-0.248	-0.248
Endogenous3	==	s14_freq	0.25403	0.149	0.125	0.125	0.125
s2_freq	~~	s4_freq	0.23418	0.045	0.045	0.161	0.161
Endogenous3	==	s6_freq	0.22979	0.348	0.293	0.293	0.293
Endogenous1	==	s3_freq	0.19772	-0.106	-0.085	-0.085	-0.085
Endogenous4	==	s9_freq	0.19725	-0.110	-0.092	-0.092	-0.092

Nota. No modification indices above threshold

Modification indices

Endogenous3	=~	s11_freq	0.18905	0.312	0.262	0.262	0.262
Endogenous2	=~	s20_freq	0.18043	0.468	0.258	0.258	0.258
Endogenous2	=~	s2_freq	0.18039	-0.586	-0.323	-0.323	-0.323
Endogenous4	=~	s10_freq	0.16890	-0.176	-0.147	-0.147	-0.147
s20_freq	~~	s5_freq	0.16793	0.053	0.053	0.143	0.143
Endogenous4	=~	s8_freq	0.16651	0.106	0.089	0.089	0.089
s3_freq	~~	s14_freq	0.14497	0.054	0.054	0.121	0.121
Endogenous5	=~	s7_freq	0.12784	-0.085	-0.049	-0.049	-0.049
s10_freq	~~	s2_freq	0.12381	0.034	0.034	0.102	0.102
Endogenous1	=~	s4_freq	0.10327	-0.081	-0.065	-0.065	-0.065
s8_freq	~~	s14_freq	0.09964	0.038	0.038	0.085	0.085
s7_freq	~~	s2_freq	0.08419	0.028	0.028	0.088	0.088
Endogenous3	=~	s8_freq	0.07996	0.092	0.077	0.077	0.077
s9_freq	~~	s5_freq	0.07645	0.026	0.026	0.104	0.104
Endogenous5	=~	s8_freq	0.07309	0.066	0.037	0.037	0.037
s7_freq	~~	s20_freq	0.07112	-0.030	-0.030	-0.068	-0.068
s11_freq	~~	s20_freq	0.06676	0.027	0.027	0.057	0.057
Endogenous3	=~	s5_freq	0.06497	0.166	0.139	0.139	0.139
s7_freq	~~	s12_freq	0.06063	0.024	0.024	0.054	0.054
s12_freq	~~	s15_freq	0.05733	0.035	0.035	0.088	0.088
s12_freq	~~	s5_freq	0.05153	-0.021	-0.021	-0.055	-0.055
Endogenous3	=~	s4_freq	0.04924	-0.149	-0.126	-0.126	-0.126
s10_freq	~~	s11_freq	0.04806	-0.020	-0.020	-0.049	-0.049
s6_freq	~~	s10_freq	0.03392	0.024	0.024	0.046	0.046
s8_freq	~~	s15_freq	0.03374	-0.030	-0.030	-0.106	-0.106
s7_freq	~~	s15_freq	0.03308	-0.030	-0.030	-0.097	-0.097
s4_freq	~~	s5_freq	0.02920	0.016	0.016	0.062	0.062
s12_freq	~~	s4_freq	0.02756	-0.015	-0.015	-0.037	-0.037
Endogenous3	=~	s10_freq	0.02367	-0.118	-0.099	-0.099	-0.099
s6_freq	~~	s14_freq	0.02354	-0.021	-0.021	-0.030	-0.030
Endogenous3	=~	s9_freq	0.02116	-0.047	-0.039	-0.039	-0.039
Endogenous2	=~	s7_freq	0.01818	0.083	0.046	0.046	0.046
s5_freq	~~	s15_freq	0.01776	0.020	0.020	0.077	0.077
Endogenous3	=~	s7_freq	0.01683	-0.041	-0.034	-0.034	-0.034
s6_freq	~~	s2_freq	0.01540	0.014	0.014	0.030	0.030
Endogenous4	=~	s11_freq	0.01150	0.042	0.035	0.035	0.035
s4_freq	~~	s15_freq	0.00887	0.013	0.013	0.046	0.046
Endogenous5	=~	s9_freq	0.00663	0.021	0.012	0.012	0.012
s11_freq	~~	s5_freq	0.00621	-0.007	-0.007	-0.020	-0.020
Endogenous4	=~	s7_freq	0.00546	0.018	0.015	0.015	0.015
s10_freq	~~	s4_freq	0.00309	-0.006	-0.006	-0.017	-0.017
s6_freq	~~	s20_freq	0.00300	-0.007	-0.007	-0.011	-0.011
s9_freq	~~	s15_freq	0.00203	0.008	0.008	0.031	0.031
Endogenous3	=~	s3_freq	0.00178	-0.026	-0.022	-0.022	-0.022
Endogenous2	=~	s4_freq	0.00148	-0.028	-0.016	-0.016	-0.016
s8_freq	~~	s6_freq	0.00109	-0.004	-0.004	-0.008	-0.008
s8_freq	~~	s3_freq	2.71e-4	-0.002	-0.002	-0.006	-0.006
s3_freq	~~	s15_freq	1.18e-4	0.002	0.002	0.006	0.006

Nota. No modification indices above threshold

Path Model

Path diagrams

