Results of the SAOM analysis with the multiply imputed data

	Stationary SAOM imputation			SAOM internal imputation		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Rate constant (period 1)	10.655			10.299		
Rate constant (period 2)	6.377			6.482		
Density	-2.22	0.114	0.109	-2.226	0.117	0.108
reciprocity	1.503	0.139	4.494	1.459	0.145	4.304
GWESP I -> K -> J (α=0.69)	0.772	0.129	2.165	0.744	0.134	2.105
outdegree activity	0.03	0.008	1.03	0.031	0.009	1.032
same group in statistics	0.361	0.108	1.435	0.406	0.109	1.502

Table 1: SAOM analysis of all waves. First wave imputed by „Stationary SAOM" (left) and null imputation (right). All later waves were imputed by SAOM internal mechanism. The analysis was run in the RSiena framework. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.

	ERGM imputation			Bayesian ERGM imputation		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Rate constant (period 1)	10.785			11.005		
Rate constant (period 2)	6.356			6.375		
Density	-2.214	0.115	0.109	-2.222	0.115	0.108
reciprocity	1.491	0.137	4.442	1.516	0.139	4.552
GWESP I -> K -> J (α=0.69)	0.781	0.134	2.184	0.765	0.131	2.149
outdegree activity	0.029	0.008	1.03	0.03	0.008	1.031
same group in statistics	0.358	0.107	1.43	0.357	0.108	1.429

Table 2: SAOM analysis of all waves. First wave imputed by ERGM (left) and Bayesian ERGM (BERGM) (right). All later waves were imputed by SAOM internal mechanism. The analysis was run in the RSiena framework. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.

Results of the SAOM analysis with null imputation and with missing actors deleted for comparison

	Null imputation			Deletion of missing actors		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Rate constant (period 1)	17.143			9.765		
Rate constant (period 2)	8.090			5.139		
Density	-1.636	0.149	0.195	-1.582	0.200	0.206
reciprocity	1.350	0.134	3.856	1.636	0.171	5.136
GWESP I -> K -> J (α=0.69)	0.456	0.119	1.578	0.283	0.158	1.327
outdegree activity	0.016	0.008	1.016	0.026	0.013	1.027
Out isolates	3.257	0.406	25.961	2.590	0.493	13.330
same group in statistics	0.434	0.112	1.543	0.413	0.132	1.512

Table 2: SAOM analysis of all waves with all waves imputed by null imputation (left) and with all actors with missing in one or more waves deleted. The analysis was run in the RSiena framework. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.

Results of the TERGM analysis with the multiply imputed data

	Period 1			Period 2		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Formation parameters						
density	-4.569	0.114	0.01	-4.76	0.141	0.009
reciprocity	1.638	0.101	5.146	1.897	0.114	6.667
GWESP (α=0.69)	0.543	0.061	1.721	0.4	0.072	1.492
odegree1.5	0.226	0.039	1.253	0.186	0.033	1.204
same group in statistics	0.261	0.072	1.299	0.606	0.092	1.834
Dissolution parameters						
density	-1.032	0.051	0.356	-0.175	0.1	0.839
reciprocity	-0.409	0.122	0.664	-1.897	0.202	0.15
same group in statistics	-0.042	0.068	0.958	-0.731	0.132	0.481

Table 3: TERGM analysis for both periods separately: First period is the transition from wave one to wave two (left), second period is the transition from wave two to wave three. First wave imputed by ***„Stationary SAOM"****. All later waves were imputed by SAOM internal mechanism. The analysis was run with the tergm package in R. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.*

All TERGMs used in this document are separable TERGMs and not joint ones. Formation and dissolution parameters are specified separately.

	Period 1			Period 2		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Formation parameters						
density	-4.463	0.066	0.012	-4.72	0.129	0.009
reciprocity	1.629	0.081	5.096	1.879	0.142	6.55
GWESP (α=0.69)	0.573	0.041	1.773	0.403	0.072	1.496
odegree1.5	0.198	0.022	1.219	0.178	0.032	1.194
same group in statistics	0.188	0.034	1.207	0.595	0.08	1.812
Dissolution parameters						
density	-1.123	0.043	0.325	-0.169	0.113	0.845
reciprocity	-0.368	0.144	0.692	-1.84	0.232	0.159
same group in statistics	0.031	0.072	1.032	-0.753	0.136	0.471

Table 4: TERGM analysis for both periods separately: First period is the transition from wave one to wave two (left), second period is the transition from wave two to wave three. First wave imputed by ***null imputation.*** *All later waves were imputed by SAOM internal mechanism. The analysis was run with the tergm package in R. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.*

	Period 1			Period 2		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Formation parameters						
density	-4.583	0.069	0.01	-4.766	0.139	0.009
reciprocity	1.618	0.096	5.043	1.877	0.126	6.537
GWESP (α=0.69)	0.56	0.049	1.751	0.404	0.083	1.498
odegree1.5	0.224	0.026	1.251	0.184	0.037	1.201
same group in statistics	0.25	0.047	1.284	0.627	0.09	1.873
Dissolution parameters						
density	-1.061	0.107	0.346	-0.183	0.093	0.833
reciprocity	-0.504	0.134	0.604	-1.844	0.218	0.158
same group in statistics	0.029	0.093	1.029	-0.7	0.145	0.497

*Table 4: TERGM analysis for both periods separately: First period is the transition from wave one to wave two (left), second period is the transition from wave two to wave three. First wave imputed by **ERGM**. All later waves were imputed by SAOM internal mechanism. The analysis was run with the tergm package in R. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.*

	Period 1			Period 2		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Formation parameters						
density	-4.54	0.064	0.011	-4.771	0.146	0.008
reciprocity	1.631	0.095	5.109	1.933	0.162	6.912
GWESP (α=0.69)	0.556	0.039	1.743	0.39	0.072	1.476
odegree1.5	0.219	0.019	1.245	0.187	0.032	1.206
same group in statistics	0.229	0.047	1.257	0.629	0.093	1.875
Dissolution parameters						
density	-1.104	0.091	0.331	-0.177	0.124	0.838
reciprocity	-0.441	0.128	0.643	-1.864	0.242	0.155
same group in statistics	0.042	0.082	1.042	-0.717	0.151	0.488

*Table 4: TERGM analysis for both periods separately: First period is the transition from wave one to wave two (left), second period is the transition from wave two to wave three. First wave imputed by **Bayesian ERGM**. All later waves were imputed by SAOM internal mechanism. The analysis was run with the tergm package in R. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.*

Results of the TERGM analysis with null imputation for all waves for comparison

	Period 1			Period 2		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Formation parameters						
density	-4.576	0.246	0.010	-5.073	0.334	0.006
reciprocity	1.672	0.313	5.321	1.989	0.289	7.309
GWESP (α=0.69)	0.559	0.128	1.748	0.420	0.126	1.522
odegree1.5	0.221	0.078	1.247	0.237	0.076	1.268
same group in statistics	0.265	0.188	1.304	0.548	0.214	1.729
Dissolution parameters						
density	-0.847	0.352	0.429	-0.018	0.203	0.983
reciprocity	0.436	0.571	1.547	-1.086	0.378	0.338
same group in statistics	-0.491	0.463	0.612	-0.887	0.358	0.412

*Table 4: TERGM analysis for both periods separately: First period is the transition from wave one to wave two (left), second period is the transition from wave two to wave three. All waves imputed by **null imputation** for comparison with the model based imputation mechanisms. The analysis was run with the tergm package in R. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.*

Results of the TERGM analysis with missing actors deleted for comparison

	Period 1			Period 2		
	Combined Estimate	**Combined SE**	**Odds Ratio**	**Combined Estimate**	**Combined SE**	**Odds Ratio**
Formation parameters						
density	-4.372	0.334	0.013	-4.912	0.450	0.007
reciprocity	1.774	0.364	5.894	2.278	0.351	9.759
GWESP (α=0.69)	0.387	0.143	1.473	0.111	0.149	1.117
odegree1.5	0.284	0.105	1.328	0.318	0.124	1.374
same group in statistics	0.249	0.211	1.283	0.825	0.254	2.281
Dissolution parameters						
density	-1.263	0.499	0.283	-0.227	0.266	0.797
reciprocity	0.031	0.749	1.031	-1.924	0.582	0.146
same group in statistics	0.309	0.611	1.362	-0.821	0.411	0.440

Table 4: TERGM analysis for both periods separately: First period is the transition from wave one to wave two (left), second period is the transition from wave two to wave three. ***All actors missing in one or more waves are deleted from the network*** *for comparison with the model based imputation mechanisms. The analysis was run with the tergm package in R. The gwesp decay-parameter was fixed at 0.69. All values were rounded to three decimal places.*