Table 1- Summary Statistics

Summary Statistics	Distressed Sample				NonDistressed Sample			
	Mean	Std.Dev	P25	P95	Mean	Std.Dev.	P25	P95
Profitability	-0.30	0.56	-0.40	0.07	-0.08	0.40	-0.07	0.16
Liquidity	0.15	0.20	0.02	0.64	0.22	0.27	0.03	0.89
Leverage	0.83	0.55	0.56	1.52	0.55	0.34	0.31	1.09
Tobin's Q	2.00	5.47	1.00	4.68	2.06	1.85	1.09	5.11
Age Var.	8.29	2.56	6.60	13.30	8.01	2.56	6.00	12.50
Edu Var.	0.99	0.39	0.70	1.70	0.95	0.34	0.70	1.50
CEO Tenure	4.24	4.70	1.10	13.50	6.11	6.88	1.60	18.90
Non CEO Tenure	5.43	7.76	0.00	23.30	7.01	8.98	0.00	26.40
Duality	0.90	0.30	1.00	1.00	0.94	0.23	1.00	1.00
Board size	7.84	2.21	6.00	12.00	7.93	2.14	6.00	12.00
Independent	0.73	0.14	0.63	0.90	0.72	0.13	0.63	0.90
Female	0.07	0.09	0.00	0.25	0.08	0.11	0.00	0.27
CEO Age	54.05	7.89	49.00	68.00	54.97	8.19	49.00	69.00
Institutional	0.47	0.33	0.17	1.00	0.55	0.32	0.27	1.00
Blockholder	2.20	1.98	1.00	6.00	2.29	1.80	1.00	5.00
Degree Percentile(Public)	66.78	21.19	49.91	96.87	64.12	20.56	47.90	95.63
Degree Percentile (Public &Private)	68.95	19.45	53.40	96.65	66.01	19.78	50.12	96.41
Degree Percentile (Full Network)	69.57	19.86	54.36	96.91	65.85	20.16	49.86	96.44
Eigenvector Percentile(Public)	63.39	22.32	47.31	96.07	59.94	23.12	43.58	93.50
Eigenvector Percentile(Public&Private)	69.65	19.28	55.48	96.87	66.20	19.88	52.95	94.94
Eigenvector Percentile(Full Network)	69.69	19.51	56.87	95.98	65.89	20.07	52.56	95.09
Degree E-I(Ivy)	-0.51	0.62	-0.87	0.81	-0.54	0.62	-0.90	0.81
Degree E-I(Top)	-0.37	0.57	-0.76	0.73	-0.36	0.68	-0.80	0.76
Degree E-I (Carnegie)	0.30	0.39	-0.01	0.93	0.31	0.40	0.00	1.00

Table 2-

Test of statistical differences in means across two groups (Distressed and Non Distressed samples) one year prior to the year of distress for each centrality measure percentile ranking in each of the three different networks. ***p<0.01, **p<0.05

Centrality	Distressed Sample (N=689)	NonDistressed Sample(N=689)	T Test T-Value
Degree Centrality (Public)	66.78	64.12	-2.36**
Degree Centrality(Public &Private)	69.29	66.01	-3.10***
Degree Centrality (Full Network)	69.57	65.84	-3.45***
Eigenvector Centrality (Public)	63.39	59.94	-2.81***
Eigenvector Centrality (Public&Private)	69.65	66.20	-3.27***
Eigenvector Centrality (Full Network)	69.69	65.88	-3.56***

Table3 – One year Lag (without interaction)

Dependent Var.(Distress=1)	Degree (Public)	Degree (Public&Private)	Degree(Full Network)	Eigenvector(Public)	Eigenvector(Public &Private)	Eigenvector(Full Network)
Degree	0.485***	0.583***	0.679***			
	(0.195)	(0.212)	(0.207)			
Eigenvector				0.304**	0.384**	0.441**
				(0.132)	(0.181)	(0.182)
Profitability	-1.649***	-1.640***	-1.643***	-1.633***	-1.640***	-1.638***
	(0.529)	(0.530)	(0.531)	(0.533)	(0..531)	(0.531)
Liquidity	-2.406***	-2.445***	-2.473***	-2.412***	-2.379***	-2.392***
	(.454)	(0.457)	(0.456)	(0.453)	(0.450)	(0.448)
Leverage	1.701***	1.676***	1.661***	1.711***	1.690***	1.675***
	(0.302)	(0.302)	(0.302)	(0.300)	(0.302)	(0.302)
Tobin's Q	-0.005	-0.005	-0.004	-0.007	-0.005	-0.004
	(0.047)	(0.048)	(0.047)	(0.053)	(0.050)	(0.048)
Age Variability	0.032	0.031	0.032	0.035	0.031	0.032
	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
Education Variability	0.224	0.239	0.240	0.225	0.238	0.238
	(0.180)	(0.181)	(0.181)	(0.181)	(0.181)	(0.181)
Non CEO Tenure	-0.009	-0.008	-0.008	-0.009	-0.010	-0.010
	(.007)	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)
CEO Duality	-0.448*	-0.461*	-0.477**	-0.475**	-0.472**	-0.479**
	(0.240)	(0.241)	(0.242)	(0.240)	(0.239)	(0.239)
Board Size	-0.032	-0.033	-0.038	-0.028	-0.025	-0.028
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
Independent	0.967**	0.988**	0.957**	1.012**	1.063**	1.060**
	(0.477)	(0.476)	(0.477)	(0.473)	(0.473)	(0.473)
Female	-0.922	-0.895	-0.911	-0.854	-0.792	-0.810
	(0.605)	(0.604)	(0.605)	(0.604)	(0.602)	(0.603)
CEO Age	-0.013*	-0.012*	-0.013*	-0.011	-0.011	-0.011
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Block ownership	0.200***	0.199***	0.200***	0.194***	0.199***	0.200***
	(0.049)	(0.049)	(0.049)	(0.049)	(0.050)	(0.049)
Institutional ownership	-1.616***	-1.599***	-1.629***	-1.560***	-1.571***	-1.585***
	(0.347)	(0.345)	(0.343)	(0.343)	(0.347)	(0.345)
constant	-2.196**	-2.664**	-2.933***	-1.598*	-2.018**	-2.208**
	(0.955)	(-1.036)	(-1.017)	(-0.836)	(0.989)	(0.991)
N	1,378	1,378	1,378	1,378	1,378	1,378
R^2	17.36%	17.44%	17.60%	17.32%	17.28%	17.35%

Table 4 – one year lag with interaction

Dependent Var.(Distress=1)	Degree (Public)	Degree (Public&Private)	Degree(Full Network)	Eigenvector(Public)	Eigenvector(Public &Private)	Eigenvector(Full Network)
	1	2	3	4	5	6
Degree	0.617***	0 .706***	0.813***			
	(0.229)	(0.255)	(0.251)			
Eigenvector				0.367**	0.601***	0.666***
				(0 .159)	(0.224)	(0.223)
Profitability	-1.654***	-1.641***	-1.645***	-1.629***	-1.634***	-1.634***
	(0.528)	(0.529)	(0.531)	(0.532)	(0.529)	(0.529)
Liquidity	-2.425***	-2.463***	-2.496***	-2.422***	-2.404***	-2.423***
	(0.457)	(0.460)	(0 .459)	(0.456)	(0.458)	(0.456)
Leverage	1.697***	1.680***	1.661***	1.715***	1.698***	1.680***
	(0.302)	(0 .303)	(0.302)	(0.301)	(0.304)	(0.304)
Tobin's Q	-0.006	-0.005	-0.004	-0.007	-0.005	-0.005
	(0 .048)	(0.048)	(0.046)	(0.054)	(0.053)	(0.050)
Age Variability	0.032	0.031	0.032	0.035	0.031	0.031
	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
Education Variability	0.220	0.235	0.232	0.225	0.232	0.227
	(0 .180)	(0.181)	(0.181)	(0.181)	(0.181)	(0.182)
Non CEO Tenure	0 .081	0.066	0.070	0.019	0 .097*	0.098*
	(0.071)	(0 .080)	(0 .076)	(0 .040)	(0 .057)	(0.058)
CEO Duality	-0.432*	-0.450*	-0.468*	-0.468*	-0.460*	-0.469*
	(0.240)	(0 .241)	(0.242)	(0 .241)	(0.239)	(0.240)
Board Size	-0.030	-0.032	-0.037	-0.028	-0.026	-0.029
	(0.031)	(0.031)	(0.031)	(0 .031)	(0.031)	(0.031)
Independent	0 .995**	0.995**	0.963**	1.025**	1.097**	1.094**
	(0.481)	(0.478)	(0.479)	(0.473)	(0.476)	(0.476)
Female	-0.883	-0.882	-0.885	-0.840	-0.768	-0.777
	(0.605)	(0.604)	(0.606)	(0.605)	(0.603)	(0.605)
CEO Age	-0.013*	-0.012*	-0.013*	-0.011	-0.012	-0.012
	(0.007)	(0.007)	(0 .007)	(0.007)	(0.007)	(0.007)
Block ownership	0.196***	0.195***	0 .197***	0 .194***	0.194***	0.196***
	(0.050)	(0.050)	(0 .049)	(0.049)	(0.050)	(0.050)
Institutional ownership	-1.598***	-1.581***	-1.617***	-1.558***	-1.560***	-1.579***
	(0.347)	(0.345)	(0.343)	(0 343)	(0.348)	(0.345)
Non-CEO Tenure* Degree	-0.022	-0.018	-0.019			
	(0.017)	(0 .019)	(0.018)			
Non-CEO Tenure *Eigenvector				-0.007	-0.026*	-0.026*
				(0.010)	(0.014)	(0.014)
constant	-2.788**	-3.187***	-3.497***	-1.864**	-2.922**	-3.132***
	(1.099)	(1.203)	(1.185)	(0.908)	(1.136)	(1.133)
N	1,378	1,378	1,378	1,378	1,378	1,378

Table 5 – Two Year Lag without interaction

Dependent Var.(Distress=1)	1 Degree (Public)	2 Degree(Public&Private)	3 Degree(Full Network)	4 Eigenvector(Public)	5 Eigenvector(Public&Private)	6 Eigenvector(Full Network)
Degree	0.296*	0.403**	0.461**			
	(0.180)	(0.190)	(0.186)			
Eigenvector				0.197	0.288*	0.383**
				(0.121)	(0.155)	(0.160)
Profitability	-1.405***	-1.401***	-1.403***	-1.401***	-1.401***	-1.401***
	(0.477)	(0.479)	(0.479)	(0.476)	(0.478)	(0.477)
Liquidity	-0.991**	-1.020***	-1.028***	-1.009***	-0.988***	-1.004***
	(0.386)	(0.384)	(0.384)	(0.383)	(0.381)	(0.381)
Leverage	1.442***	1.438***	1.428***	1.447***	1.436***	1.416***
	(0.260)	(0.260)	(0.259)	(0.259)	(0.260)	(0.259)
Tobin's Q	-0.209***.	-0.210***	-0.209***	-0.213***	-0.212***	-0.210***
	(0.057)	(0.057)	(0.057)	(0.057)	(0.056)	(0.056)
Age Variability	0 .029	0.029	0 .029	0 .030	0.028	0.029
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
Education Variability	0.336**	0.348**	0.353**	0.331**	0.346**	0.348**
	(0.167)	(0.167)	(0.167)	(0.167)	(0.167)	(0.167)
Non CEO Tenure	-0.022***	-0.021***	-0.021***	-0.022***	-0.022***	-0.022***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
CEO Duality	-0.236	-0.241	-0.250	-0.246	-0.247	-0.253
	(0.200)	(0.199)	(0.200)	(0.199)	(0.198)	(0.198)
Board Size	0.010	0.008	0.005	0 .012	0.013	0.010
	(0.030)	(0.030)	(0.030)	(0.030)	(0.029)	(0.029)
Independent	0.917**	0 .915**	0.889**	0.907**	0.907**	0.879**
	(0 .432)	(0.431)	(0.432)	(0.433)	(0.432)	(0.433)
Female	-1.082*	-1.088*	-1.095*	-1.026*	-1.016*	-1.050*
	(0.604)	(0.603)	(0.602)	(0.598)	(0.599)	(0.601)
CEO Age	-0.011	-0.010	-0.010	-0.010	-0.010	-0.010
	(0.006)	(0 .006)	(0.006)	(0 .006)	(0.006)	(0.006)
Block ownership	0.126***	0.124***	0 .125***	0.125***	0.125***	0.128***
	(0.047)	(0 .047)	(0.047)	(0.046)	(0.046)	(0.047)
Institutional ownership	-0.910***	-0.907***	-0.918***	-0.886***	-0.894***	-0.922***
	(0.309)	(0.307)	(0.306)	(0.306)	(0 .306)	(0 306)
constant	-1.766*	-2.219**	-2.409**	-1.390*	-1.787**	-2.114**
	(0 .920)	(0.973)	(0.953)	(0.781)	(0.873)	(0.882)
N	1,524	1,524	1,524	1,524	1,524	1,524
R^2	11.24%	11.31%	11.39%	11.25%	11.27%	11.38%

Table 6 – Two Yeat Lag (with interaction)

Dependent Var.(Distress=1)	1 Degree (Public)	2 Degree(Public&Private)	3 Degree(Full Network)	4 Eigenvector(Public)	5 Eigenvector(Public &Private)	6 Eigenvector(Full Network)
Degree	0.520**	0.580**	0.649***			
	(0.213)	(0.232)	(0.228)			
Eigenvector				0.256*	0.461**	0.609***
				(0.150)	(0.205)	(0.209)
Profitability	-1.414***	-1.406***	-1.408***	-1.395***	-1.412***	-1.415***
	(0 .478)	(0.479)	(0.480)	(0.475)	(0.479)	(0.479)
Liquidity	-1.024***	-1.047***	-1.060***	-1.021***	-1.016***	-1.041***
	(0.389)	(0.386)	(0.385)	(0.382)	(0.382)	(0.382)
Leverage	1.429***	1.436***	1.423***	1.446***	1.431***	1.407***
	(0.260)	(0.260)	(0.260)	(0.259)	(0.260)	(0.260)
Tobin's Q	-0.204***	-0.208***	-0.206***	-.0211***	-0.210***	-0.207***
	(0.057)	(0.057)	(0.057)	(0.057)	(0.056)	(0.056)
Age Variability	0.029	0.029	0.029	0.030	0.028	0.029
	(0.022)	(0.022)	(0.022)	(0.022)	(0 .022)	(0.022)
Education Variability	0.339**	0.350**	0.355**	0.335**	0.348**	0.352**
	(0.166)	(0.167)	(0.167)	(0.167)	(0.166)	(0.166)
Non CEO Tenure	0.128*	0.086	0.092	0.006	0.078	0.103
	(0.072)	(0.079)	(0 .077)	(0.044)	(0.069)	(0.069)
CEO Duality	-0.222	-0.233	-0.245	-0.241	-0.241	-0.247
	(0.199)	(0.199)	(0.199)	(0.200)	(0.199)	(0.199)
Board Size	0.014	0.008	(0.005)	0.012	0.013	0.009
	(0.030)	(0.030)	(0.030)	(0.030)	(0.029)	(0.029)
Independent	0 .952**	0.927**	0.900**	0 .916**	0.925**	0.897**
	(0.437)	(0.433)	(0.434)	(0.434)	(0.434)	(0.435)
Female	-1.065*	-1.088*	-1.093*	-1.022*	-1.017*	-1.053*
	(0.604)	(0.603)	(0.602)	(0.597)	(0.600)	(0.601)
CEO Age	-0.011	-0.010	-0.010	-0.010	-0.010	-0.010
	(0.006)	(0.006)	(0 .006)	(0 .006)	(0.006)	(0.006)
Block ownership	0.126***	(0 .123)***	0.124***	0.125***	0.124***	(0.126)***
	(0.047)	(0.047)	(0 .047)	(0.046)	(0.046)	(0.047)
Institutional ownership	-0.902***	-0.896***	-0.909***	-0.892***	-0.888***	-0.912***
	(0.309)	(0.308)	(0.307)	(0.307)	(0.307)	(0.307)
Non-CEO Tenure* Degree	-0.037**	-0.026	-0.027			
	(0.017)	(0.019)	(0 .019)			
Non-CEO Tenure *Eigenvector				-0.007	-0.024	-0.030*
				(0.011)	(0.016)	(0.016)
constant	-2.752***	-2.974***	-3.203***	-1.636*	-2.509**	-3.055***
	(1.057)	(1.137)	(1.116)	(0.871)	(1.055)	(1.066)
N	1,524	1,524	1,524	1,524	1,524	1,524
R^2	11.43%	11.39%	11.49%	11.27%	11.36%	11.53%

Table 7 - CEO age <54 - subsample – one year lag

Dependent Var.(Distress=1)	Degree (Public)	Degree(Public&Private)	Degree(Full Network)	Eigenvector(Public)	Eigenvector(Public&Private)	Eigenvector(Full Network)
Degree	0.750**	0.468	0.556*			
	(0.289)	(0.317)	(0.311)			
Eigenvector				0.350**	0.481*	0.452*
				(0.178)	(0.257)	(0.262)
Profitability	-2.017***	-2.012***	-2.014***	-1.978***	-1.996***	-1.993***
	(0.568)	(0.581)	(0.582)	(0.582)	(0.582)	(0.582)
Liquidity	-3.050***	-2.977***	-2.997***	-2.968***	-2.949***	-2.932***
	(0.528)	(0.535)	(0.535)	(0.528)	(0.525)	(0.524)
Leverage	1.178***	1.195***	1.182***	1.209***	1.172***	1.175***
	(0.421)	(0.422)	(0.421)	(0.418)	(0.421)	(0.422)
Tobin's Q	0.020*	0.020*	0.020*	0.019*	0.021*	0.021
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Age Variability	0.146***	0.143***	0.143***	0.146***	0.139***	0.141***
	(0.036)	(0.035)	(0.036)	(0.036)	(0.036)	(0.035)
Education Variability	0.275	0.271	0.273	0.284	0.283	0.285
	(0.276)	(0.277)	(0.278)	(0.279)	(0.278)	(0.279)
Non Ceo Tenure	-0.031***	-0.033***	-0.033***	-0.032***	-0.034***	-0.035***
	(0.012)	(0.012)	(0.011)	(0.012)	(0.011)	(0.011)
CEO Duality	-0.603	-0.615	-0.618	-0.636	-0.600	-0.614
	(0.404)	(0.403)	(0.405)	(0.406)	(0.403)	(0.403)
Board Size	-0.030	-0.015	-0.019	-0.015	-0.010	-0.010
	(0.048)	(0.047)	(0.048)	(0.047)	(0.047)	(0.047)
% Independent	0.292	0.437	0.412	0.417	0.463	0.470
	(0.695)	(0.693)	(0.695)	(0.688)	(0.695)	(0.694)
% Female	-1.394	-1.126	-1.153	-1.201	-1.101	-1.094
	(0.993)	(0.973)	(0.975)	(0.968)	(0.969)	(0.970)
Block ownership	0.088	0.086	0.089	0.089	0.092	0.094
	(0.072)	(0.071)	(0.071)	(0.071)	(0.072)	(0.071)
Institutional ownership	-0.785*	-0.695	-0.728	-0.702	-0.725	-0.727
	(0.474)	(0.474)	(0.470)	(0.467)	(0.473)	(0.471)
constant	-4.050***	-3.174**	-3.465***	-2.635***	-3.264***	-3.162**
	(1.266)	(1.353)	(1.326)	(0.995)	(1.241)	(1.246)
N	664	664	664	664	664	664
R^2	19.47%	19.01%	19.13%	19.13%	19.12%	19.06%

Table 8 CEO age ≥ 54 – subsample- one year lag

Dependent Var.(Distress=1)	Degree (Public)	Degree(Public &Private)	Degree(Full Network)	Eigenvector(Public)	Eigenvector(Public &Private)	Eigenvector(Full Network)
Degree	0.066	0.488	0.559*			
	(0.298)	(0.310)	(0.298)			
Eigenvector				0.234	0.193	0.298
				(0.192)	(0.272)	(0.263)
Profitability	-1.674**	-1.635**	-1.629**	-1.660**	-1.660**	-1.654**
	(0.817)	(0.821)	(0 .826)	(0.811)	(0.816)	(0 .820)
Liquidity	-0.626	-0.726	-0.757	-0.691	-0.645	-0.675
	(0.800)	(0.817)	(0.821)	(0 .792)	(0 .798)	(0.805)
Leverage	2.790***	2.731***	2.717***	2.758***	2.765***	2.738***
	(0.497)	(0 .500)	(0 .501)	(0.492)	(0 .498)	(0 .499)
Tobin's Q	-0.566***	-0.548***	-0.545***	-0.566***	-0.561***	-0.556***
	(0.109)	(0.109)	(0.109)	(0.106)	(0.108)	(0.108)
Age Variability	-0.056	-0.056	-0.055	-0.052	-0.055	-0.054
	(0.034)	(0.035)	(0.034)	(0.035)	(0 .035)	(0.035)
Education Variability	0.230	0.245	0.239	0.214	0.235	0.230
	(0.034)	(0.265)	(0.265)	(0.266)	(0.265)	(0.265)
Non Ceo Tenure	-0.0006	0.002	0.002	0 .001	0.0005	0.001
	(0.008)	(0.008)	(0.008)	(0.008)	(0.0089)	(0.008)
CEO Duality	-0.551*	-0.522	-0.547*	-0.528	-0.544	-0.543*
	(0.325)	(0.323)	(0.321)	(0 .323)	(0.321)	(0 .320)
Board Size	-0.046	-0.059	-0.064	-0.053	-0.050	-0.055
	(0.045)	(0.046)	(0.046)	(0.045)	(0 .045)	(0.045)
% Independent	1.422*	1.303*	1.276*	1.321*	1.385*	1.372*
	(0.739)	(0.739)	(0.740)	(0.734)	(0.734)	(0.732)
% Female	-1.116	-1.267	-1.259	-1.161	-1.131	-1.157
	(0.876)	(0.877)	(0.874)	(0 .878)	(0.876)	(0 .876)
Block ownership	0.236***	0 .243***	0 .243***	0 .235***	0.237***	0.238***
	(0.072)	(0.072)	(0 .072)	(0.072)	(0.072)	(0.072)
Institutional ownership	-2.157***	-2.254***	-2.266***	-2.231***	-2.188***	-2.210***
	(0.539)	(0.528)	(0.527)	(0.540)	(0 .535)	(0 .532)
constant	-0.574	-2.138	-2.343*	-1.089	-1.049	-1.421
	(1.337)	(1.417)	(1.360)	(1.018)	(1.314)	1.291
N	714	714	714	714	714	714
R^2						
	23.08%	23.32%	23.41%	23.22%	23.13%	23.21%

Table 9 CEO age < 50 − Young CEOs Subsample

Dependent Var.(Distress=1)	Degree (Public)	Degree(Public&Private)	Degree(Full Network)	Eigenvector(Public)	Eigenvector(Public&Private)	Eigenvector(Full Network)
	1	2	3	4	5	6
Degree	1.254***	1.297***	1.288***			
	(0.407)	(0 .418)	(0.408)			
Eigenvector				0.814***	1.149***	0.976***
				(0.281)	(0.340)	(0.351)
Profitability	-1.472**	-1.398**	-1.393**	-1.316**	-1.320**	-1.309**
	(0.587)	(0.582)	(0.582)	(0.582)	(0.583)	(0.576)
Liquidity	-2.859***	-2.753***	-2.704***	-2.742***	-2.672***	-2.593***
	(0.733)	(0.738)	(0.732)	(0.713)	(0.712)	(0.704)
Leverage	1.551***	1.601***	1.612***	1.640***	1.569***	1.586***
	(0.566)	(0.568)	(0.565)	(0.576)	(0.573)	(0.569)
Tobin's Q	-0.137	-0.140	-0.142	-0.160*	-0.138	-0.139
	(0.094)	(0.105)	(0.107)	(0.090)	(0.100)	(0.101)
Age Variability	0.105**	0.100**	0.102**	0 .112**	0.090*	0.096**
	(0.048)	(0.048)	(0.048)	(0.049)	(0.047)	(0.047)
Education Variability	0.207	0.230	0.216	0.238	0.289	0.281
	(0.353)	(0.346)	(0.346)	(0.356)	(0.357)	(0.353)
Non Ceo Tenure	-0.035*	-0.036**	-0.036**	-0.031*	-0.041**	-0.042**
	(0.018)	(0 .018)	(0.018)	(0.018)	(0.017)	(0.017)
CEO Duality	-0.943*	-0.930*	-0.948*	-1.022*	-0.909*	-0.941*
	(0.503)	(0.498)	(0.501)	(0.527)	(0.507)	(0.509)
Board Size	-0.212***	-0.198***	-0.202***	-0.196***	-0.189***	-0.184***
	(0.068)	(0.066)	(0 .066)	(0.067)	(0.065)	(0.065)
% Independent	-0.026	0.122	0 .106	0.126	0.237	0.264
	(0.863)	(0.868)	(0.868)	(0.867)	(0.873)	(0.867)
% Female	-1.504	-1.381	-1.349	-1.412	-1.208	-1.230
	(1.051)	(1.045)	(1.044)	(1.017)	(1.025)	1.026
Block ownership	0.123	0.115	0.114	0.121	0.139	0 .135
	(0.102)	(0.101)	(0.100)	(0.100)	(0.101)	(0.100)
Institutional ownership	-1.400**	-1.367**	-1.359**	-1.297**	-1.438**	-1.369**
	(0.618)	(0 .619)	(0.617)	(0.614)	(0.624)	(0.618)
constant	-3.446**	-3.925**	-3.861**	-1.890	-3.458**	-2.851*
	(1.630)	(1.741)	(1.694)	(1.310)	(1.591)	(1.604)
N	400	400	400	400	400	400
R^2	21.92%	21.88%	21.96%	21.68%	21.97%	21.43%

Table 9 CEO age between 50 and 60– Middle - aged CEOs Subsample

	1	2	3	4	5	6
Dependent Var.(Distress=1)	Degree (Public)	Degree(Public&Private)	Degree(Full Network)	Eigenvector(Public)	Eigenvector(Public&Private)	Eigenvector(Full Network)
Degree	0.168	0.314	0 .323			
	(0.264)	(0.291)	(0.282)			
Eigenvector				0.178	0.124	0.230
				(0.198)	(0.270)	(0.264)
Profitability	-2.096**	-2.082**	-2.082**	-2.094**	-2.102**	-2.092**
	(0.955)	(0.952)	(0.957)	(0.953)	(0.955)	(0.953)
Liquidity	-1.125	-1.174	-1.193	-1.149	-1.126	-1.144
	(0.781)	(0.791)	(0.799)	(0.777)	(0.781)	(0.784)
Leverage	1.967***	1.942***	1.936***	1.958***	1.967***	1.945***
	(0.444)	(0.447)	(0.449)	(0.442)	(0.447)	(0.448)
Tobin's Q	-0.447***	-0.441***	-0.439***	-0.452***	-0.449***	-0.445***
	(0.105)	(0.106)	(0.107)	(0.104)	(0.105)	(0.105)
Age Variability	0.008	0.001	0.0007	0.0006	0.0003	0.0006
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Education Variability	0 .418	0.425	0.427	0.418	0.418	0.421
	(0.278)	(0.279)	(0.279)	(0.280)	(0.279)	(0.279)
Non Ceo Tenure	-0.021**	-0.020**	-0.020**	-0.020**	-0.021**	-0.021**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
CEO Duality	-0.660*	-0.656*	-0.670*	-0.658*	-0.671*	-0.667*
	(0.353)	(0.353)	(0.352)	(0.354)	(0.352)	(0.352)
Board Size	0.006	0 .001	0.0002	0.004	0 .008	0.005
	(0.043)	(0 .043)	(0.0434)	(0.043)	(0.042)	(0.043)
% Independent	0.869	0.860	0.861	0.865	0 .908	0.900
	(0.659)	(0.658)	(0.658)	(0.657)	(0.654)	(0.656)
% Female	-0.568	-0.595	-0.594	-0.559	-0.505	-0.524
	(0.916)	(0.914)	(0.914)	(0.914)	(0.909)	(0.911)
Block ownership	0.161**	0.163**	0.163**	0.160**	0.159**	0.162**
	(0.069)	(0.069)	(0.069)	(0.069)	(0.069)	(0.069)
Institutional ownership	-1.221**	-1.250**	-1.258**	-1.238**	-1.201**	-1.239**
	(0.515)	(0.512)	(0.507)	(0.516)	(0.517)	(0.513)
constant	-1.407	-1.967	-1.972	-1.394	-1.270	-1.665
	(1.219)	(1.331)	(1.291)	1.005	1.284	1.282
N	728	728	728	728	728	728
R^2	20.63%	20.71%	20.72%	20.68%	20.62%	20.67%

Table 9 CEO age greater than 60 – older CEOs Subsample

Dependent Var.(Distress=1)	1 Degree (Public)	2 Degree(Public&Private)	3 Degree(Full Network)	4 Eigenvector(Public)	5 Eigenvector(Public& Private)	6 Eigenvector(Full Network)
Degree	0.165	-0.137	0.383			
	(0.523)	(0.564)	(0.577)			
Eigenvector				0.147	-0.093	0.160
				(0.314)	(0.390)	(0.380)
Profitability	-2.046**	-2.073**	-2.049**	-2.037**	-2.070**	-2.060**
	(0.941)	(0.951)	(0.932)	(0.946)	(0 .954)	(0.937)
Liquidity	-1.469	-1.404	-1.513	-1.481	-1.413	-1.487
	(1.055)	(1.055)	(1.038)	(1.051)	(1.053)	(1.040)
Leverage	2.762***	2.777***	2.726***	2.744***	2.783***	2.729***
	(0.639)	(0.639)	(0.645)	(0.643)	(0.647)	(0.646)
Tobin's Q	-0.526**	-0.532**	-0.524**	-0.528**	-0.535**	-0.522**
	(0.249)	(0.251)	(0.241)	(0.250)	(0.253)	(0.246)
Age Variability	0.035	0.031	0.036	0.039	0.030	0.036
	(0.060)	(0 .060)	(0.061)	(0.062)	(0.061)	(0.061)
Education Variability	-0.193	-0.190	-0.174	-0.204	-0.186	-0.184
	(0.436)	(0.432)	(0.429)	(0 .438)	(0 433)	(0.430)
Non Ceo Tenure	0.025*	0.024*	0.026*	0.025*	0.024*	0.025*
	(0.014)	(0.014)	(0 .014)	(0.013)	(0.014)	(0 .014)
CEO Duality	-0.113	-0.166	-0.115	-0.113	-0.162	-0.126
	(0.559)	(0.552)	(0.546)	0 .557	(0.548)	(0.548)
Board Size	-0.016	-0.008	-0.022	-0.017	-0.008	-0.017
	(0.076)	(0.076)	(0.076)	(0.075)	(0.075)	(0.075)
% Independent	1.730	1.811	1.644	1.672	1.808	1.717
	(1.212)	(1.216)	(1.225)	(1.230)	(1.224)	(1.217)
% Female	-1.275	-1.161	-1.310	-1.273	-1.185	-1.256
	(1.503)	(1.519)	(1.485)	(1.511)	(1.513)	(1.505)
Block ownership	0.108	0 .101	0.109	0.102	0.102	0.105
	(0.119)	(0.117)	(0.117)	(0.117)	(0.117)	(0.1170
Institutional ownership	-1.566*	-1.468*	-1.583*	-1.554*	-1.478*	-1.534*
	(0.872)	(0.840)	(0.833)	(0.843)	(0.840)	(0.835)
constant	-2.347	-1.181	-3.159	-2.202	-1.357	-2.316
	(2.433)	(2.608)	(2.617)	(1.755)	(2.032)	(2.004)
N	250	250	250	250	250	250
	22.61%	22.60%	22.72%	22.64%	22.60%	22.63%

Table 11 – Attribute based centrality – one year lag

Dependent Var.(Distress=1)	1 E-I (Ivy)	2 E-I(Top)	3 E-I(Carnegie)	4 E-I(Ivy) Dummy	5 E-I(Top) Dummy	6 E-I(Carnegie) Dummy
Degree E-I	0.054	-0.041	-0.124	-0.070	0.134	0.057
	(0.091)	(0.089)	(0.151)	(0.147)	(0.132)	(0.143)
Profitability	-1.780***	-1.789***	-1.789***	-1.782***	-1.791***	-1.788***
	(0.427)	(0.429)	(0.425)	(0.427)	(0.429)	(0.427)
Liquidity	-2.196***	-2.172***	-2.203***	-2.191***	-2.159***	-2.192***
	(0.775)	(0.775)	(0.772)	(0.775)	(0.773)	(0.771)
Leverage	1.676***	1.691***	1.681***	1.678***	1.701***	1.685***
	(0.299)	(0.299)	(0.297)	(0.299)	(0 .300)	(0.297)
Tobin's Q	-0.062	-0.062	-0.063	-0.062	-0.063	-0.063
	(0.290)	(0.290)	(0 .289)	(0.289)	(0 291)	(0.290)
Age Variability	0 .032	0.032	0.033	0.033	0.032	0.033
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
Education Variability	0.042	0.042	0.044	0 .042	0 .042	0.040
	(0.176)	(0.176)	(0.176)	(0.175)	(0.175)	(0.176)
Non Ceo Tenure	-0.009	-0.009	-0.009	-0.009	-0.009	-0.009
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0 .007)
CEO Duality	-0.521**	-0.521**	-0.530**	-0.528**	-0.514**	-0.523**
	(0.233)	(0.233)	(0.234)	(0.233)	(0.233)	(0.233)
Board Size	-0.053*	-0.053*	-0.056*	-0.052*	-0.052*	-0.054*
	(0.030)	(0.030)	(0.031)	(0.030)	(0.030)	(0.030)
R&D	0.723	0 .708	0 .700	0 .693	0.693	0.698
	1.052	1.057	1.046	1.062	1.062	(1.047)
constant	-0.312	-0.312	-0.217	-0.412	-0.412	-0.289
	(0 .588)	(0 .587)	(0.599)	(0.600)	(0.600)	(0.579)
N	1,354	1,354	1,354	1,354	1,354	1,354
R^2	14.48%	14.47%	14.50%	14.47%	14.52%	14.47%

Table 12 – Attribute based centrality – one year lag – with interaction

Dependent Var.(Distress=1)	1 E-I (Ivy)	2 E-I(Top)	3 E-I(Carnegie)	4 E-I(Ivy) Dummy	5 E-I(Top) Dummy	6 E-I(Carnegie) Dummy
Degree E-I	-0.029	-0.139	-0.209	0.051	0.282*	0.154
	(0.102)	(0.103)	(0.163)	(0.166)	(0.145)	0 .162
Profitability	-1.769***	-1.776***	-1.777***	-1.772***	1.784***	-1.767***
	(0.424)	(0.424)	(0.427)	(0.425)	(0.425)	(0.427)
Liquidity	-2.235***	-2.219***	-2.205***	-2.224***	-2.229***	-2.185***
	(0.769)	(0.794)	(0.757)	(0.772)	(0.782)	(0 .723)
Leverage	1.685***	1.711***	1.693***	1.687***	1.724***	1.716***
	(0.302)	(0.300)	(0.297)	(0.302)	(0.302)	(0.297)
Tobin's Q	-0.068	-0.063	-0.060	-0.068	-0.066	-0.061
	(0.300)	(0.300)	(0.288)	(0.299)	(0.296)	(0.279)
Age Variability	0.033	0.032	0.032	0.033	0.031	0.032
	(0.022)	(0.022)	(0.022)	(0 .022)	(0.022)	(0.022)
Education Variability	0.021	0.034	0.056	0.022	0.030	0.044
	(0.177)	(0.177)	(0.176)	(0.177)	(0.177)	(0.176)
Non Ceo Tenure	-0.009	-0.009	-0.009	-0.009	-0.009	-0.009
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
CEO Duality	-0.524**	-0.516**	-0.543**	-0.526**	-0.515**	-0.528**
	(0.234)	(0.234)	(0.235)	(0.234)	(0.236)	(0.234)
Board Size	-0.054*	-0.053*	-0.059*	-0.053*	-0.050*	-0.057*
	(0.030)	(0.030)	(0.031)	(0.030)	(0.030)	(0.030)
R&D	1.658	1.397	0.444	2.653	2.655**	1.175
	(1.203)	(1.099)	(1.142)	(1.662)	(1.336)	(1.050)
R&D* E-I (Ivy)	1.603*			-2.168*		
	(0.826)			(1.248)		
R&D *E-V(top)		1.896**			-2.397**	
		(0.965)			(1.035)	
R&D*E-I(Carnegie)			1.188			-1.161
			(1.183)			(1.119)
constant	-0.270	-0.351	-0.179	-0.302	-0.526	-0.311
	(0.578)	(0.583)	(0.596)	(0.577)	(0.582)	(0.565)
N	1,354	1,354	1,354	1,354	1,354	1,354
R^2	14.72%	14.77%	14.58%	14.67%	14.86%	14.59%

Table 13 Financially distressed firms are identified by experiencing both a financial distress event and firm's Z score is less than 1.81 at the year of the distress event

	1	2	3	4	5	6
Dependent Var.(Distress=1)	Degree (Public)	Degree(Public& Private)	Degree(Full Network)	Eigenvector(Public)	Eigenvector(Public&Private)	Eigenvector(Full Network)
Degree	0.526**	0.653**	0.760***			
	(0.240)	(0.259)	(0.255)			
Eigenvector				0.369**	0.582**	0.692***
				(0.165)	(0.234)	(0.235)
Profitability	-1.349**	-1.338**	-1.332**	-1.331**	-1.337**	-1.337**
	(0.554)	(0.556)	(0.559)	(0.552)	(0.556)	(0.559)
Liquidity	-1.418**	-1.462***	-1.492***	-1.454***	-1.440***	-1.464***
	(0.550)	(0.554)	(0.554)	(0.542)	(0.552)	(0.555)
Leverage	1.934***	1.923***	1.908***	1.919***	1.914***	1.893***
	(0.353)	(0.353)	(0.353)	(0.352)	(0.354)	(0.354)
Tobin's Q	-0.322***	-0.322***	-0.321***	-0.330***	-0.320***	-0.318***
	(0.099)	(0.097)	(0.097)	(0.100)	(0.100)	(0.100)
Age Variability	0.019	0.018	0.018	0.023	0.019	0.020
	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)
Education Variability	0.240	0.268	0.261	0.242	0.267	0.261
	(0.225)	(0.226)	(0.226)	(0.228)	(0.226)	(0.227)
Non Ceo Tenure	-0.010	-0.010	-0.009	-0.010	-0.011	-0.108
	(0.008)	(0.008)	0.008	(0.008)	(0.008)	(0.008)
CEO Duality	-0.742**	-0.754**	-0.775**	-0.775**	-0.763**	-0.773**
	(0.309)	(0.309)	(0.309)	(0.312)	(0.308)	(0.310)
Board Size	-0.029	-0.030	-0.036	-0.024	-0.026	-0.037
	(0.037)	(0.037)	(0.037)	(0.036)	(0.036)	(0.036)
% Independent	0.668	0.690	0.647	0.696	0.742	0.743
	(0.575)	(0.571)	(0.571)	(0.571)	(0.569)	(0.569)
% Female	-1.885**	-1.890**	-1.896**	-1.826**	-1.808**	-1.855**
	(0.729)	(0.732)	(0.732)	(0.732)	(0.729)	(0.734)
CEO Age	-0.016*	-0.016*	-0.017*	-0.015*	-0.015	-0.015*
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Block ownership	0.163***	0.162***	0.165***	0.160***	0.166***	0.171***
	(0.058)	(0.058)	(0.058)	(0.058)	(0.058)	(0.059)
Institutional ownership	-1.565***	-1.548***	-1.594***	-1.529***	-1.564***	-1.603***
	(0.413)	(0.412)	(0.412)	(0.414)	(0.415)	(0.414)
constant	-1.264	-1.851	-2.117*	-0.671	-1.689	-2.061
	(1.207)	(1.301)	(1.266)	(1.022)	(1.277)	(1.276)
N	992	992	992	992	992	992
R^2	19.38%	19.49%	19.67%	19.40%	19.49%	19.66%

Table 14   Financially distressed firms are identified by experiencing both a financial distress event and firm's Z score is less than 2.99 at the year of the distress event

Dependent Var.(Distress=1)	1 Degree (Public)	2 Degree(Public&Private)	3 Degree(Full Network)	4 Eigenvector(Public)	5 Eigenvector(Public& Private)	6 Eigenvector(Full Network)
Degree	0.500**	0.6263***	0.7322***			
	(0.225)	(0.239)	(0.236)			
Eigenvector				0.288*	0.456**	0.558***
				(0.150)	(0.208)	(0.210)
Profitability	-1.452**	-1.442**	-1.436**	-1.441**	-1.444**	-1.441**
	(0.562)	(0.563)	(0.566)	(0.563)	(0.563)	
Liquidity	-1.678***	-1.718***	-1.752***	-1.680***	-1.669***	-1.699***
	(0.543)	(0.546)	(0.546)	(0.535)	(0.539)	(0.541)
Leverage	1.851***	1.839***	1.821***	1.854***	1.842***	1.819***
	(0.328)	(0.329)	(0.329)	(0.326)	(0.329)	(0.329)
Tobin's Q	-0.303***	-0.303***	-0.301***	-0.312***	-0.304***	-0.301***
	(0.095)	(0.094)	(0.093)	(0.096)	(0.096)	(0.096)
Age Variability	0.025	0.023	0.023	0.028	0.025	0.026
	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)
Education Variability	0.259	0.280	0.272	0.261	0.278	0.272
	(0.213)	(0.213)	(0.214)	(0.214)	(0.213)	(0.213)
Non Ceo Tenure	-0.010	-0.100	-0.009	-0.010	-0.107	-0.010
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
CEO Duality	-0.737**	-0.747**	-0.766**	-0.776**	-0.766**	-0.771**
	(0.307)	(0.308)	(0.308)	(0.310)	(0.307)	(0.308)
Board Size	-0.024	-0.025	-0.031	-0.019	-0.019	-0.024
	(0.034)	(0.034)	(0.035)	(0.034)	(0.034)	(0.034)
% Independent	0.670	0.682	0.647	0.724	0.738	0.735
	(0.538)	(0.537)	(0.537)	(0.531)	(0.534)	(0.534)
% Female	-1.443**	-1.433**	-1.449**	-1.364**	-1.333**	-1.359**
	(0.683)	(0.685)	(0.686)	(0.682)	(0.681)	(0.684)
CEO Age	-0.015*	-0.014*	-0.157*	-0.014*	-0.013	-0.014
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Block ownership	0.173***	0.172***	0.175***	0.168***	0.173***	0.177***
	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)
Institutional ownership	-1.460***	-1.455***	-1.502***	-1.397***	-1.436***	-1.472***
	(0.387)	(0.384)	(0.385)	(0.385)	(0.387)	(0.387)
constant	-1.353	-1.901	-2.186	-0.585	-1.364	-1.706
	(1.131)	(1.212)	(1.185)	(0.968)	(1.171)	(1.175)
N	1,120	1,120	1,120	1,120	1,120	1,120
R^2	18.48%	18.59%	18.77%	18.40%	18.47%	18.61%

Table 15 Financially distressed firms are identified by experiencing both a financial distress event and interest coverage ratio is less than one at the year of distress

Dependent Var.(Distress=1)	1 Degree (Public)	2 Degree(Public&Private)	3 Degree(Full Network)	4 Eigenvector(Public)	5 Eigenvector(Public&Private)	6 Eigenvector(Full Network)
Degree	0.517**	0.569**	0.635**			
	(0.254)	(0.271)	(0.268)			
Eigenvector				0.216	0.463**	0.484**
				(0.160)	(0.231)	(0.232)
Profitability	-1.923**	-1.920**	-1.917**	-1.918**	-1.913**	-1.913**
	(0.765)	(0.767)	(0.769)	(0.776)	(0.768)	(0.769)
Liquidity	-2.213***	-2.247***	-2.269***	-2.183***	-2.206***	-2.215***
	(0.712)	(0.717)	(0.716)	(0.705)	(0.709)	(0.709)
Leverage	1.942***	1.932***	1.917***	1.966***	1.941***	1.924***
	(0.391)	(0.392)	(0.393)	(0.388)	(0.391)	(0.392)
Tobin's Q	-0.346***	-0.347***	-0.344***	-0.356***	-0.348***	-0.346***
	(0.116)	(0.114)	(0.114)	(0.117)	(0.117)	(0.116)
Age Variability	-0.016	-0.019	-0.018	-0.015	-0.017	-0.017
	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)
Education Variability	0.283	0.305	0.299	0.283	0.301	0.298
	(0.236)	(0.237)	(0.237)	(0.239)	(0.237)	(0.237)
Non Ceo Tenure	-0.008	-0.008	-0.007	-0.009	-0.008	-0.008
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
CEO Duality	-0.780**	-0.805**	-0.815**	-0.821**	-0.809**	-0.812**
	(0.333)	(0.333)	(0.333)	(0.334)	(0.333)	(0.334)
Board Size	-0.048	-0.046	-0.050	-0.039	-0.043	-0.045
	(0.040)	(0.040)	(0.040)	(0.039)	(0.039)	(0.039)
% Independent	1.013*	1.049*	1.018*	1.115*	1.093*	1.105*
	(0.614)	(0.609)	(0.609)	(0.604)	(0.605)	(0.603)
% Female	-0.673	-0.618	-0.640	-0.553	-0.525	-0.543
	(0.765)	(0.764)	(0.764)	(0.763)	(0.764)	(0.766)
CEO Age	-0..014	-0.014	-0.015	-0.013	-0.013	-0.013
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Block ownership	0.248***	0.245***	0.246***	0.238***	0.246***	0.247***
	(0.064)	(0.064)	(0.064)	(0.063)	(0.064)	(0.064)
Institutional ownership	-2.238***	-2.214***	-2.239***	-2.131***	-2.213***	-2.218***
	(0.434)	(0.430)	(0.430)	(0.432)	(0.433)	(0.431)
constant	-0.997	-1.256	-1.417	0.042	-0.957	-1.017
	(1.294)	(1.370)	(1.353)	(1.087)	1.306	(1.315)
N	896	896	896	896	896	896
	22.36%	22.39%	22.49%	22.17%	22.35%	22.37%